

# Legislative Status Report for the 2007 General Assembly Session

## Department of Housing and Community Development

HB 2048 McQuigg	HB 2048 prohibits the State Fire Marshal from charging faith-based schools a permit inspection fee.	Passed the House (97-0).
SB 1053 Edwards	This bill requires the Board of Housing and Community Development to promulgate regulations as part of the Uniform Statewide Building Code (USBC) that authorize a locality to require building permits for the installation of replacement siding, roofing, and windows in buildings within designated historic zoning districts within the locality.	Passed the Senate (37-3). <u>Referred to House Committee on General Laws.</u>
HB 2789 Hull	This bill amends the statute for the Uniform Statewide Building Code regarding violations of the Building Code resulting in a dwelling not being safe, decent and sanitary.	<u>Passed the House (97-0).</u>
HB 2497 Orrock	HB 2489 allows a local building department to issue a blanket permit for new school construction in order to eliminate the need to obtain permits for new ancillary buildings on the same property. The amendment provides that a building official may issue an annual permit for any construction regulated by the Building Code	<u>Passed the House (97-0).</u>
HB 2489 Bulova	HB 2489 allows localities may by ordinance place a time limit (which cannot be less than 3 years) for the construction of single-family dwellings. The measure the provisions of such an ordinance and specifies the authority of localities once such a time limit has passed.	Referred to House Committee on Counties, Cities and Towns. Assigned to Subcommittee #2.

**NON-CONSENSUS CODE CHANGES**

**VIRGINIA CONSTRUCTION CODE**

**DEPT. OF HOUSING AND COMMUNITY DEVELOPMENT REGULATORY CHANGE FORM**

(Use this form to submit changes to building and fire codes)

<b>Address to submit to:</b>  DHCD, the Jackson Center 501 North Second Street Richmond, VA 23219-1321  Tel. No. (804) 371 – 7150 Fax No. (804) 371 – 7092 Email: bhcd@dhcd.state.va.us		<b>Document No.</b> _____ <b>Committee Action:</b> _____ <b>BHCD Action:</b> _____
<b>Submitted by:</b> <u>DHCD, Technical Assistance Services Office</u> <b>Representing:</b> _____ <b>Address:</b> _____ <b>Phone No.:</b> _____ <b>Regulation Title:</b> <u>2006 USBC Construction Code</u> <b>Section No(s):</b> <u>107.2</u>		
<b>Proposed Change:</b>  107.2 Code academy fee levy. In accordance with subdivision 7 of § 36-137 of the Code of Virginia, the local building department shall collect a 1.75% levy of fees charged for building permits issued under this code and transmit it quarterly to DHCD to support training programs of the Virginia Building Code Academy. <u>The foregoing levy shall remain effective until June 30, 2009, after which time the fee levy shall be increased to 2%.</u> Localities that maintain individual or regional training academies accredited by DHCD shall retain such levy.		
<b>Supporting Statement:</b>  The Technical Assistance Services Office is preparing a report to submit with this code change substantiating the need for the increase in the fee levy.		

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<p>Submitted by: <u>John Catlett</u> Representing: <u>VBCOA</u></p> <p>Address: <u>401 Lafayette Street; Williamsburg VA 23185</u> Phone No.: <u>(757) 220-6135</u></p> <p>Regulation Title: <u>Virginia New Construction Code</u> Section No(s): <u>108.2</u></p>		

Proposed Change:

**108.2 Exemptions from application for permit.** Notwithstanding the requirements of Section 108.1, application for a permit and any related inspections shall not be required for the following; however, this section shall not be construed to exempt such activities from other applicable requirements of this code. In addition, when an owner or an owner's agent requests that a permit be issued for any of the following, then a permit shall be issued and any related inspections shall be required.

Items 1 through 7 are unchanged. Item # 9 regarding signs to be renumbered #8 and item #10 regarding LP gas containers to be renumbered #9

10. Ordinary repairs which do not adversely affect public health or general safety. Ordinary repairs shall not include including (i) the removal ~~cutting away~~ of any wall, partition or portion thereof; (ii) the removal or alteration of cutting of any structural beam or loadbearing support; (iii) the repair or replacement of any required component of a fire or smoke rated assembly; (iv) the removal or change alteration of any required means of egress system; ~~(v) the rearrangement of parts of a structure affecting the egress requirements~~; ~~(v) the addition to, alteration of, replacement of or relocation of any standpipe, water supply, sewer, drainage, drain leader, gas or oil, soil, waste, vent water supply and distribution system, sanitary drainage system, or vent system or similar piping, electric wiring, fire protection system, mechanical system or fuel supply system work~~; or (vi) any other work affecting public health or general safety. ~~However, Ordinary repairs~~ Ordinary repairs shall include, but are not limited to, the following:

DELETE THE CURRENT SUB-SECTIONS (8.1 through 8.3) TO ITEM #8 AND REPLACE WITH THE FOLLOWING:

- 10.1. Replacement of windows and doors, that are not required to be fire rated, in: group R-2 where serving a single dwelling unit, R-3, R-4, and R-5;
- 10.2. Replacement of plumbing fixtures, in all use groups, without alteration of water supply and distribution systems, sanitary drainage systems, or vent systems;
- 10.3. Replacement of general use snap switches, receptacle outlets, light fixtures (luminaries) and ceiling fans in non-classified locations in all occupancies, except group H and I-2, provided the replacement is installed without the addition or alteration of branch circuits;
- 10.4. Replacement of mechanical equipment, provided such equipment is not fueled by gas or oil, in group R-2 where serving a single dwelling unit, R-3, R-4, and R-5;
- 10.5. Replacement of an unlimited amount of roof covering or siding in Group R-3, R-4 or R-5 occupancies provided the building or structure is not in an area where the design (3 second gust) wind speed is greater than 100 miles per hour (160 km/hr) and Replacement of 100 sq. ft. or less of roof covering in all use groups and all wind zones;
- 10.6. Replacement of 100 sq. ft. or less of roof decking in Group R-3, R-4 or R-5 occupancies unless the decking to be replaced was required at the time of original construction to be fire retardant treated or protected in some other way to form a fire rated wall termination;
- 10.7. Installation or replacement of floor finishes in all occupancies;
- 10.8. Replacement of class C interior wall or ceiling finishes installed in group A, E and I occupancies and replacement of all classes of interior wall or ceiling finishes installed in occupancies other than group A, E and I;
- 10.9. Installation or replacement of cabinetry or trim,
- 10.10. Application of paint or wallpaper.
- 10.11. Other repair work deemed by the code official to be minor and ordinary which does not adversely affect public health or general safety.

### Supporting Statement:

Section #8 has been relocated to the end of the list and renumbered #10 in an attempt to keep the long list of ordinary repairs as the last item so that the current items #9 and #10 are easier to find.

### Editorial changes:

Section 10.0 replace the word "cutting" with "removal" and "alteration", divide the section into three sentences for clarity, replace "removal or change" with "alteration", condense the two items regarding means of egress into one item and clean up the wording, update the plumbing system terminology, removed "but not limited to" as a catch-all in the charging statement and placed it into the list as item # 10.11.

The creation of subsections .1 through .11 editorially is an attempt to take mix of ordinary repairs currently listed in three sub-sections and organize them into individual subject specific sub-sections such that they are easier to interpret and apply.

A number of terms were updated with more current terminology that is found in the model codes; some examples are: "water supply and distribution", "general use snap switches", "roof decking"

### Technical changes:

10, Replacement or repair of fire and smoke rated assembly components was added to make it clear that any component that may otherwise be exempted by the following list as an ordinary repair does require a permit if the component is part of a rated assembly. The existing 2003 USBC language exempts all interior wall finish replacements. If the interior wall finish also forms part of a required fire rated assembly (Fire Wall, Fire Partition, Fire Barrier, Smoke barrier), then a permit should be secured and inspections conducted to make sure that the proper material is utilized and installed to maintain the fire resistive rating. Many times, required fire rated materials (rated gypsum wall board) is replaced with a non-rated material when it becomes damaged. Improper fasteners may used or not correctly spaced and through penetrations are not properly sealed. Common places where this occurs is in dwelling unit separations in apartments and townhouses, guest room separations in hotels, and in required fire rated corridors in all occupancies.

10.1, The existing residential exemptions for door and window replacements was changed to require permits when the doors are required to be fire rated; such as fire rated corridor and breezeway doors to R-2 dwellings or protected openings in R-3 or R-4.

10.4, the exemption for replacement of electrical outlet devices was expanded beyond residential uses to similar commercial applications. Occupancy groups H and I, and classified areas were not included and replacement of devices in those areas is still required.

10.5, The roof covering exemption was expanded to allow up to 100 sf of roof repair or replacement regardless of the occupancy classification or wind zone.

10.6, The addition of this language is intended to clarify that roof sheathing is not the same as roof finish replacement. It is not uncommon to replace damaged or rotted sheathing as part of a roof replacement. However, the sheathing forms part of the structure and can be an important part of the building design. Many roof replacements at townhouses and other residential occupancies involve replacing deteriorated FRT plywood in a 4 foot area adjacent to fire walls between units. This practice has been used for many years to replace parapet fire walls. Typically, permits are not received and the material replaced with non FRT plywood. The resulting laps in the required fire preventive material can lead to the spread of fire between units. This still allows up to 100 sf of deck replacement without requiring a permit to allow for a limited amount of deck replacement in conjunction with a re-roofing job.

10.8, Interior wall finishes are regulated in Chapter 8 (Section 803) and in other areas of the code such as Section 411.8 for special amusement buildings. The flame spread and smoke development potential is a critical element in occupant safety, especially in areas with high occupant loads or where building occupants are incapable of self preservation. Interior finishes are frequently changed in restaurants, night clubs, museums and other places of public assembly. The code change adds a requirement that use groups A, E and I should not be exempted from permits (and ultimately inspections) to insure compliance unless they are allowed to be a type C finish.

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<p>Submitted by: <u>John Catlett</u> Representing: _____</p> <p>Address: <u>401 Lafayette Street: Williamsburg VA 23185</u> Phone No.: <u>(757) 220-6135</u></p> <p>Regulation Title: <u>Virginia New Construction Code</u> Section No(s): <u>111.2 (Revised 10/20/06)</u></p>		
<p><del>Proposed Change: 111.2 Special inspection requirements. Special inspections shall be conducted under the supervision of registered design professionals and in accordance with Section 1704. Persons engaged in the testing and inspection of construction materials, and the facilities, equipment and procedures they use in the process, shall comply or other standards acceptable to the building official. The building official may require written documentation of personnel certifications and laboratory accreditation, when appropriate, as evidence of conformance with this section.</del></p> <p><u>Special inspections shall be conducted when required by Section 1704; or when specified for specific or unique structural elements by the Registered Design Professionals (RDP) responsible for a building or structure's design and determined necessary by the building official. They shall be performed by individuals and agents that are qualified in accordance with the applicable provisions of ASTM E329 or be a RDP.</u></p> <p><u>Individuals and or agencies conducting special inspections shall meet the requirements of Section 1703.</u></p> <p><u>The permit applicant shall submit and the building official shall approve a statement and schedule of special inspections as required in Sections 1704.1.1 and 1705 as a requisite to the issuance of a building permit. The building official may require interim inspection reports and shall require a final report of special inspections as specified in Section 1704.1.2. All fees and costs related to the special inspections shall be the responsibility of the building owner.</u></p>		

Supporting Statement: The current code language contains a reference to ASTM E329 when evaluating the certification or accreditation of an individual or laboratory conducting special inspection services. It also states that the building official can approve alternatives to ASTM E329. In actuality, ASTM E329 already contains language that allows this practice at the end of section 7.2.2, 7.2.3 and 7.2.4 respectively (attached). The proposed language allows the building official to accept alternatives to the laundry list of certifications as long as the intended qualifications are met.

The proposed code change also establishes that there shall be an RDP in responsible charge of special inspection activities and that special inspectors must be independent from contractor performing the physical construction activities. This would not preclude the RDP of record from performing SI functions.

Typically known as the "agent 1", the RDP in responsible charge is the person or firm responsible for the coordination of special inspection activities and reports. Other agents or laboratories may be hired to carry out the SI function, but the RDP in responsible charge of SI shall be responsible for their coordination.

The change sets out a procedure for considering alternative certifications and qualifications and for the issuing of reports.

#### ASTM E329 language:

7.2.2 A laboratory supervisor shall have at least five years experience performing tests on relevant construction materials. This person shall be able to demonstrate either by oral or written examination, or both, their ability to perform the tests normally required in the manner stipulated under ASTM or other governing test procedures and shall be capable of evaluating the test results in terms of specification compliance. Certification by ACI (American Concrete Institute) Laboratory Testing Technician, Grade II or NICET (National Institute for Certification of Engineering Technicians) Level III or higher, or certification by other qualified national, regional or state authorities as appropriate to the work, is required.

7.2.3 A field supervisor shall have at least five years inspection experience in the type of work being supervised. This person shall be able to demonstrate, either by oral or written examination, or both, their ability to perform correctly the required duties and shall be capable of evaluating the inspection or test results in terms of specification compliance. Certification by ACI (Concrete Construction Inspector or Concrete Transportation Construction Inspector), BOCA/ICBO Reinforced Concrete Special Inspector, NICET (Level III or higher), ASNT (Level II or III), AWS (CWI), or certification by other qualified national, regional or state authorities as appropriate to the work, is required.

7.2.4 *Inspector or Technician*—This person shall have sufficient education and on-the-job training or trade school training to properly perform the test or inspection to which the person is assigned. This person must be able to demonstrate competence for the test or inspection which is being conducted either by oral or written examination, or both. Certification by ACI (American Concrete Institute), BOCA/ICBO Reinforced Concrete Special Inspector, AWS (American Welding Society), ASNT (American Society for Nondestructive Testing), NICET (National Institute for Certification of Engineering Technicians), ICC (International Code Council), ICBO (International Council of Building Officials), BOCA (Building Officials Code Administration), as appropriate for the work being performed, or certification by other qualified national authorities as appropriate to the work; shall be considered as one means of documenting competency. The Inspector or Technician shall work under the direct supervision of personnel meeting the requirements of 7.2.2 or 7.2.3 (see Appendix X1).



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Supporting Statement: The current code language contains a reference to ASTM E329 when evaluating the certification or accreditation of an individual or laboratory conducting special inspection services. It also states that the building official can approve alternatives to ASTM E329. In actuality, ASTM E329 already contains language that allows this practice at the end of section 7.2.2, 7.2.3 and 7.2.4 respectively (attached). The proposed language allows the building official to accept alternatives to the laundry list of certifications as long as the intended qualifications are met.

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ASTM E329 language:

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7.2.3 A field supervisor shall have at least five years inspection experience in the type of work being supervised. This person shall be able to demonstrate, either by oral or written examination, or both, their ability to perform correctly the required duties and shall be capable of evaluating the inspection or test results in terms of specification compliance. Certification by ACI (Concrete Construction Inspector or Concrete Transportation Construction Inspector), BOCA/ICBO Reinforced Concrete Special Inspector, NICET (Level III or higher), ASNT (Level II or III), AWS (CWI), or certification by other qualified national, regional or state authorities as appropriate to the work, is required.

7.2.4 *Inspector or Technician*—This person shall have sufficient education and on-the-job training or trade school training to properly perform the test or inspection to which the person is assigned. This person must be able to demonstrate competence for the test or inspection which is being conducted either by oral or written examination, or both. Certification by ACI (American Concrete Institute), BOCA/ICBO Reinforced Concrete Special Inspector, AWS (American Welding Society), ASNT (American Society for Nondestructive Testing), NICET (National Institute for Certification of Engineering Technicians), ICC (International Code Council), ICBO (International Council of Building Officials), BOCA (Building Officials Code Administration), as appropriate for the work being performed, or certification by other qualified national authorities as appropriate to the work; shall be considered as one means of documenting competency. The Inspector or Technician shall work under the direct supervision of personnel meeting the requirements of 7.2.2 or 7.2.3 (see Appendix X1).

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<p>Proposed Change:</p> <p><b>1703.1 Approved agency.</b> <del>An approved agency shall provide all information as necessary for the building official to determine that the agency meets the applicable requirements.</del> <u>responsible for laboratory testing and/or special inspections must satisfy the building official that they comply with the qualification, certification and experience requirements of ASTM E329 or the alternatives listed therein.</u></p> <p><b>1703.1.1 Independent.</b> <del>An approved agency shall be objective and competent. The agency shall also disclose possible conflicts of interest so that objectivity can be confirmed.</del> <u>The Special Inspector and their agents shall be independent from the person(s) or contractor responsible for the physical construction of the project requiring special inspections.</u></p> <p><b>1703.1.2 Equipment.</b> <del>An approved agency shall have adequate equipment to perform required tests. The equipment shall be periodically calibrated.</del></p> <p><b>1703.1.3 Personnel and laboratories.</b> <del>An approved agency shall employ experienced personnel educated in conducting, supervising and evaluating tests and/or inspections. Upon request by the building official, documentation shall be provided demonstrating the applicable agency's laboratory accreditation, when applicable, and individual resumes' indicating pertinent training, certifications and other qualifications shall be provided for special inspection personnel associated with the project. The building official may prescribe the manner of qualification documentation and frequency of updating information regarding agency or individual inspector approval.</del></p> <p><u>Firms providing special inspection services or individual inspectors seeking approval of alternative certifications and/or qualifications not specifically listed in ASTM E329 may submit documentation demonstrating equivalency. This documentation may include evidence of meeting other recognized standards or alternative certifications to demonstrate that the minimum qualifications, certification and experience intended by ASTM E329 have been met. The building official may approve the credentials of the firm or individual after evaluating and determining that equivalency has been demonstrated.</u></p> <p><b>1704.1 General.</b> <del>Where application is made for construction as described in this section, the owner or the registered design professional in responsible charge acting as the owner's agent shall employ one or more special inspectors to provide inspections during construction on the types of work listed under Section 1704. The special inspector shall be a qualified person who shall demonstrate competence, to the satisfaction of the building official, for inspection of the particular type of construction or operation requiring special inspection. These inspections are in addition to the inspections specified in Section 109. All individuals or agents performing special inspection functions shall operate under the direct supervision of an RDP in responsible charge of special inspection activities; also known as the Special Inspector. The Special Inspector shall ensure that the individuals under their charge are performing only those special inspections or laboratory testing that are consistent with their knowledge, training and certification for the specified inspection or laboratory testing.</del></p>		

Supporting Statement:

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Submitted by: Robert Sullivan Representing: Nelligan Insulation, Inc.  
 Address: 2539 Fairview Avenue, Lynchburg, VA 24501 Phone No.: (434) 847-4774 or (434) 546-3632 (Cell)  
 Regulation Title: VIRGINIA CONSTRUCTION CODE (Part I) Section No(s): 113.3.6

Proposed Change: Insert [to include insulation as well as air-seal caulking and/or gasketing materials] so that 113.3.6 reads as follows:

"6. Inspection of energy conservation material, to include insulation as well as air-seal caulking and/or gasketing materials, prior to concealment."

**Supporting Statement:** Virginia will soon adopt the 2006 IECC which is greatly simplified when compared to the 2003 IECC and its predecessors. The 2006 IECC anticipates the fact that the vast majority of architects and builders rely upon "off-the-shelf" prescriptive measures e.g. fiberglass batting, blown or sprayed loose-fill, various foams etc. to comply with the building envelope performance requirements of the code.

It is well known that all installed building insulation materials perform better in conjunction with air-infiltration abatement materials. Studies have shown that approximately 25% of all infiltration occurs through the joint between the sole plate and the floor deck. The presence of simple bead of caulk at that joint may be verified visually concurrent with visual verification of installed wall insulation without added time, effort or manpower.

IECC Compliance Guide for Homes in Virginia (2006 IECC) includes Step-by-Step Instructions which reads:

- "2. Construct the building according to the envelope performance requirements and comply with certain other basic code requirements, which include:
- a. providing preventative maintenance manuals
  - b. attaching a permanent certificate listing insulation, window & HVAC performance information
  - c. installing temperature controls
  - d. limiting window and door leakage
  - e. caulking or sealing joints and penetrations
  - f. installing vapor retarders (in certain circumstances)
  - g. sealing and insulating ducts"

It is common practice for insulators to "chink" around window and door openings; however, it is not common practice for insulators to caulk and seal framing joints and penetrations unless requested to do so by builders and/or owners who recognize and desire the benefit of these measures.

Considering that rising energy costs is an on-going issue faced by all Virginians, and considering that the present code, as well as the soon to be adopted code, appears to require these measures, it seems appropriate to clarify the matter by inserting the proposed language to better ensure uniform enforcement among code jurisdictions.

**Vernon Hodge**

**From:** Emory Rodgers  
**Sent:** Thursday, January 18, 2007 7:02 AM  
**To:** Tomberlin, Guy; Vernon Hodge; Richard Bartell; Roger Robertson; JOHN CATLETT  
**Cc:** Sandi Morris  
**Subject:** RE: Bob Sullivan's Insulation Questions

Guy: Were the person to submit a code change expanding our minimum inspections, your point seem to oppose such a code change. Agree with you where problem lies when there is one. On Code Connection we always remain open to articles from our stakeholders but clearly understand such articles are not to be sale pitches for products. Since we have no such article on this issue, it is premature to conjecture if it would be accepted and included in the Spring edition. Thanks for your response and pointing out the complexity of such issues.

**From:** Tomberlin, Guy [mailto:Guy.Tomberlin@fairfaxcounty.gov]  
**Sent:** Wednesday, January 17, 2007 7:56 AM  
**To:** Emory Rodgers; Vernon Hodge; Richard Bartell; Roger Robertson; JOHN CATLETT  
**Cc:** Sandi Morris  
**Subject:** RE: Bob Sullivan's Insulation Questions

It is my opinion that these type intricate details pertaining to duct/insulation installations need not be included in the USBC. This is getting into micro management of how each jurisdiction inspects items required by the USBC. This could easily be heading for "leakage" test on duct work. I can write a book on the difficulties the code enforcement community would experience if duct leakage tests were required. If a code change were approved on this level of detail then we will have every manufacturer submitting proposals (basically their installation instructions) to reference to the details of their products. All the codes already cover this; they all say mgf installation instructions are enforceable. Look at fire caulking/stopping for example. This is defiantly a life safety issue yet according to industry more than 80% of failures are due to faulty installations. I could endorse more stringent code provisions for something like this way before we get down into the grass on duct sealing inspections. In my experience (more than 20 years) I have seen absolutely zero issues associated with duct sealing that have had a negative impact on the public safety and welfare of the citizens in VA. Please let me know if a code change gets submitted on this. I am sure our code committees will vehemently oppose this.

I am not sure this is a code connection item but it's not really my place to determine what makes it in that publication. However, if an article of this nature makes it in the code connection it seems only logical (fair) to start incorporating an "industry section" to allow all manufactures and vender s to promote their particular industries and products.

I believe I have talked to this gentleman and if he is the same person I believe he is; I found that his comments could easily be construed as more than offensive on how VA, as a whole, does their job performing inspections. Unfortunately during my conversation it was never clear to me that his negative comments on how poorly the VA code enforcement community performs their jobs was based on public safety or selling product.

Guy Tomberlin, CBO  
 and Development Services (LDS)  
 2055 Government Center Parkway, Suite 630

# DEPT. OF HOUSING AND COMMUNITY DEVELOPMENT REGULATORY CHANGE FORM

(Use this form to submit changes to building and fire codes)

<p>Address to submit to:</p> <p>DHCD, the Jackson Center 501 North Second Street Richmond, VA 23219-1321</p> <p>Tel. No. (804) 371 - 7150 Fax No. (804) 371 - 7092 Email: bhcd@dhcd.state.va.us</p>		<p>Document No. _____</p> <p>Committee Action: _____</p> <p>BHCD Action: _____</p>
<p>Submitted by: <u>  Lynn Underwood, CBO  </u> Representing: <u>  City of Norfolk  </u></p> <p>Address: <u>  400 Granby, Norfolk, Va 23510  </u> Phone No.: (757) 664-6511 <u>      </u></p> <p>Regulation Title: <u>  Design Criteria  </u> Section No(s): <u>  Section R301.2.1.1  </u></p>		
<p><b>Proposed Change:</b>  <b>R301.2.1.1 Design criteria.</b> Construction in regions where the basic wind speeds from Figure R301.2(4) equal or exceed <del>100 miles per hour (45 m/s) in hurricane-prone regions, or</del> 110 miles per hour (49m/s) elsewhere, shall be designed in accordance with one of the following:  1. American Forest and Paper Association (AF&amp;PA) <i>Wood Frame Construction Manual for One- and Two-Family Dwellings</i> (WFCM); or  2. <i>Southern Building Code Congress International Standard for Hurricane Resistant Residential Construction</i> (SSTD 10); or  3. <i>Minimum Design Loads for Buildings and Other Structures</i> (ASCE-7); or  4. American Iron and Steel Institute (AISI), <i>Standard for Cold-Formed Steel Framing—Prescriptive Method For One- and Two-Family Dwellings (COFS/PM) with Supplement to Standard for Cold-Formed Steel Framing—Prescriptive Method For One- and Two-Family Dwellings</i>.  5. Concrete construction shall be designed in accordance with the provisions of this code.</p>		
<p><b>Supporting Statement:</b>  This proposed change in the 2006 IRC would preserve consistency for one and two family dwelling construction in the 2000 and 2003 IRC in Coastal Virginia. Decreasing the threshold wind speed from 110 to 100 mph would force several jurisdictions to require a Registered Design Professional to design single family buildings. This action would be inconsistent with the Purpose and Scope: "... <i>That buildings and structures should be permitted to be constructed at the least possible cost...</i>".</p>		

**DEPT. OF HOUSING AND COMMUNITY DEVELOPMENT REGULATORY CHANGE FORM**  
(Use this form to submit changes to building and fire codes)

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<b>Submitted by:</b> <u>Michael Redifer</u> <b>Representing:</b> _____		
<b>Address:</b> _____		<b>Phone No.:</b> _____
<b>Regulation Title:</b>	<u>Virginia Construction Code</u>	<b>Section No(s):</b> <u>R317.1</u>
<b>Proposed Change:</b>  R317.1 Two-family dwellings. Dwelling units in two-family dwellings shall be separated from each other by wall and/or floor assemblies having not less than a 1-hour fire-resistance rating when tested in accordance with ASTM E 119. Fire-resistance-rated floor-ceiling and wall assemblies shall extend to and be tight against the exterior wall, and wall assemblies shall extend to <u>and be tight against</u> the underside of the roof sheathing. <u>Wall assemblies constructed on a lot line shall be extended as required for townhouses in Section R317.2.2.</u>  <b>Exceptions:</b>  1. A fire-resistance rating of ½ hour shall be permitted in buildings equipped throughout with an automatic sprinkler system installed in accordance with NFPA 13. 2. <u>For two-family dwellings located on the same lot, wall assemblies need not extend through attic spaces when the ceiling is protected by not less than 5/8-inch (15.9 mm) Type X gypsum board and an attic draft stop constructed as specified in Section R502.12.1 is provided above and along the wall assembly separating the dwellings. The structural framing supporting the ceiling shall also be protected by not less than ½-inch (12.7 mm) gypsum board or equivalent.</u>		
<b>Supporting Statement:</b>  There has been some confusion regarding the required fire-resistance rating of separation walls of two-family dwellings when such walls are constructed on a lot line. This change is to clarify that the presence of a lot line does not increase the life-safety hazard associated with the occupancy of the building and therefore no increase in the fire-resistance-rating is necessary. The change does, however, recognize a need to provide an increase in property protection and does so by incorporating the parapet (or alternate adjacent roof) protection found in Section R317.2.2 and by reference R317.2.3 applicable to townhouse construction.		



# HOUSING AND COMMUNITY DEVELOPMENT REGULATORY CHANGE FORM

(Use this form to submit changes to building and fire codes)

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<p>Submitted by:                      Chuck Bajnai, residential plan reviewer</p> <p>Representing:                      Chesterfield County Building Inspections</p> <p>Address:                              Chesterfield County, VA</p> <p>Phone No.:                          804-717-6428</p> <p>Regulation Title: Section No(s): USBC effective 11-16-2005,    Changes R403.1,    Exception    Condition #1</p>													
<p>Proposed Change:      USBC R403.1 Exception, Condition 1 should be changed to:</p> <p style="text-align: center;">"The building height is not more than <u>10 feet at the eave</u>"</p>													
<p>Supporting Statement:</p> <p>The 2003 IRC section 403.1.4.1, Exception 1: "Freestanding accessory structures with an area of 400 sqft or less and an eave height of 10 ft or less..."</p> <p>A 16'x16' storage shed (256 sqft, as currently written by USBC) cannot exceed 12' high (i.e. 6:12 slope roof). If the language was modified to agree with the IRC then steeper roof slopes could be accommodated.</p> <p>Extrapolated from current code sections:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 40%;">Storage sheds 0-150 sqft:</td> <td style="width: 20%;">no permit</td> <td style="width: 40%;"></td> </tr> <tr> <td>Storage sheds 150-256 sqft:</td> <td>permit    limitation: 12' tall</td> <td>anchored, but no permanent footings</td> </tr> <tr> <td>Storage sheds 257-400 sqft:</td> <td>permit    limitation: 10' at eaves</td> <td>permanent footings without frost protection</td> </tr> <tr> <td>Storage sheds greater than 400 sqft</td> <td>permit</td> <td>permanent footings with frost protection</td> </tr> </table> <p>The change, if accepted, will make the two code section requirements compatible and reduce the provisional conditions to purely footing related (instead of height related also).</p>		Storage sheds 0-150 sqft:	no permit		Storage sheds 150-256 sqft:	permit    limitation: 12' tall	anchored, but no permanent footings	Storage sheds 257-400 sqft:	permit    limitation: 10' at eaves	permanent footings without frost protection	Storage sheds greater than 400 sqft	permit	permanent footings with frost protection
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Storage sheds greater than 400 sqft	permit	permanent footings with frost protection											

## CODE CHANGE PROPOSAL

Please provide all of the following items in your code change proposal. Your proposal may be entered on the following form, or you may attach a separate file. However, please read the instructions provided for each part of the code change proposal. The sections identified in parentheses are the applicable sections from CP #28 Code Development. The full procedures can be downloaded from [www.iccsafe.org](http://www.iccsafe.org).

**Code Sections/Tables/Figures Proposed for Revision (3.3.2):** Table R602.3(5)

**Note:** If the proposal is for a new section, indicate (new).

**Name/Company/Representing (3.3.1):** Chuck Bajnai, Chesterfield, VBCOA

**Note:** You must indicate your name and the full name of who you are representing. Do not use acronyms.

**Proposal:**

1. column 4: Maximum spacing when supporting roof and ceiling

Add new footnote reference "c" so it would read:

"Maximum spacing when supporting one floor, roof and ceiling (inches)<sup>c</sup>."

2. Footnotes: Add new footnote c:

"c. Shall include:

- one floor, roof and ceiling,
- one floor, roof and an attic floor with a live load of 40 psf in the space where headroom is 5' or taller,
- one floor, and room trusses up to 32 feet span with a live load of 40 psf in the space where headroom is 5' or taller."

**Note:** Show the proposal using ~~strikeout~~, underline format. At the beginning of each section, one of the following instruction lines are also needed:

- Revise as follows
- Add new text as follows
- Delete and substitute as follows
- Delete without substitution

**Supporting Information (3.3.4 & 3.4):**

Table R602.3(5) is tacit about how to handle room trusses, or third floor/attic floors where the head room provides useable space (i.e. greater than 5' tall).

Currently if you used room trusses or had third floor/attic with head room of 5 feet or greater, the table would not be useable and would force you out of the IRC, or as a minimum to 2x6 studs from column 5.

November 15, 2005

**Note:** The following items are required to be included:

**Purpose:** The proponent shall clearly state the purpose of the proposed code change (e.g., clarify the Code; revise outdated material; substitute new or revised material for current provision of the Code; add new requirements to the Code; delete current requirements, etc.)

**Reasons:** The proponent shall justify changing the current code provisions, stating why the proposal is superior to the current provisions of the Code. Proposals that add or delete requirements shall be supported by a logical explanation which clearly shows why the current Code provisions are inadequate or overly restrictive, specifies the shortcomings of the current Code provisions and explains how such proposals will improve the Code.

**Substantiation:** The proponent shall substantiate the proposed code change based on technical information and substantiation. Substantiation provided which is reviewed in accordance with Section 4.2 and determined as not germane to the technical issues addressed in the proposed code change shall be identified as such. The proponent shall be notified that the proposal is considered an incomplete proposal in accordance with Section 4.3, and the proposal shall be held until the deficiencies are corrected. The proponent shall have the right to appeal this action in accordance with the policy of the ICC Board. The burden of providing substantiating material lies with the proponent of the code change proposal. A minimum of two copies of all substantiating information shall be submitted. (3.4)

**Bibliography:** The proponent shall submit a bibliography of any substantiating material submitted with the code change proposal. The bibliography shall be published with the code change and the proponent shall make the substantiating materials available for review at the appropriate ICC office and during the public hearing.

**Referenced Standards (3.4 & 3.6):**

List any new referenced standards that are proposed to be referenced in the code and provide a minimum of two copies. For ICC rules on referenced standards, see Section 3.6 of CP #28.

**Cost Impact (3.3.4.6):**

**Note:** The proponent shall indicate one of the following regarding the cost impact of the code change proposal:

- 1) The code change proposal will increase the cost of construction; or
- 2) The code change proposal will not increase the cost of construction.

This information will be included in the published code change proposal.

RE: 2006 Virginia uniform Statewide Building Code- Recommended Amendment

January 19, 2006

Dear Mr. Hodge,

Winchester Homes, Inc would like to submit the following recommend amendments for consideration and incorporation into the 2006 edition of the Virginia uniform Statewide Building Code. Thank you for your consideration of this matter. If you should need to contact me please don't hesitate to either e-mail me or call me directly at (410) 365-7781.

Sincerely,

Winchester Homes, Inc.  
By Randall K. Melvin  
Director Codes and Construction Risk

cc: Mr. Denis Mitchell Loudoun County, Virginia  
Mr. Lynch Fairfax and Mr. Chris McArtor Fairfax County, Virginia  
Mr. Eric Mays Prince William County, Virginia  
Mr. Jim Williams NVBIA

Virginiacodeammendmentrequest22006.doc

**Issue: Window Sill Height**

**2006 IRC Section: R613.2 Window sills**

**Recommended Amendment: Delete text as follows**

**~~R613.2 Window sills.~~** ~~In dwelling units, where the opening of an operable window is located more than 72 inches (1829mm) above the finished grade or surface below, the lowest part of the clear opening of the window shall be a minimum of 24 inches (610 mm) above the finished floor of the room in which the window is located. Glazing between the floor and 24 inches (610 mm) shall be fixed or have openings through which a 4" diameter (102 mm) sphere cannot pass~~

### Exceptions:

1. ~~Windows whose openings will not allow a 4" diameter (102 mm) sphere to pass through the opening when the opening is in its largest opened position.~~
2. ~~Openings that are provided with window guards that comply with ASTM F 2006 or F 2090.~~

### Reason:

This requirement is not based on sound technical information that adequately substantiates that such a requirement will result in any improvement in protecting small children from window falls. There is no documented relationship between center of gravity, window sill height and falls from windows and therefore no basis for establishing what is "too low," what and adequate medium is, the role the window sill height plays, especially in relation to other relevant factors or that there is even a need for such a requirement.

The assumption that a minimum window sill height of 24" will have a significant impact on reducing window falls of infants and younger children is just that-an assumption, and one that is based on limited data to support that assumption. Furthermore, there has been no discussion or apparent consideration for unintended consequences that may result from this requirement, such as encouraging climbing near windows which is a significant factor in window falls involving children.

Of the interests weighing in on the issue such as the National Safety Council, American Association of Pediatrics, consumer Products Safety Commission, the Timothy Healy Foundation, and other national, state and local agencies and organizations, regarding children falling from windows, there has been little to no discussion or concerns raised with respect to window sill height being a significant factor in these falls and no advocacy efforts on their part, that we are aware of, to establish minimum sill heights in building codes. Given the great deal of attention these organizations have given the matter, their omission of window sill height in any of their recommendations is not an oversight. They instead focus on preventive measures that have proven to be very successful such as the use of operable window guards and stops and community outreach and education about window safety.

The international code Council, National Association of Home Builders, National Safety Council and other interests are all currently working together to improve window safety awareness. This course of action will assuredly contribute to reducing the number of falls from window as opposed to setting a minimum requirement with only theoretical gains.

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<p>Submitted by: Guy Tomberlin, Fairfax County      Representing: VA Building and Code Officials Association (VBCOA) and VA Plumbing and Mechanical Inspectors Association (VPMIA)</p> <p>Address: 12055 Government Center Pkwy., Suite 630 Fairfax, VA 22030      Phone No.: 703-324-1611</p> <p>Regulation Title: Part I Construction USBC      Section No(s): Technical amendments to the IRC</p>		

**Proposed Change:**

**Proposal:**

Delete these definitions and terms with out substitution:

~~**CONFINED SPACES.** A space having a volume less than 50 cubic feet per 1,000 British thermal units per hour (Btu/h) (4.8 m<sup>3</sup>/kW) of the aggregate input rating of all appliances installed in that space.~~

~~**UNCONFINED SPACE.** A space having a volume not less than 50 cubic feet per 1,000 Btu/h (4.8 m<sup>3</sup>/kW) of the aggregate input rating of all appliances installed in that space. Rooms communicating directly with the space in which the appliances are installed, through openings not furnished with doors, are considered a part of the unconfined space.~~

~~**UNUSUALLY TIGHT CONSTRUCTION.** Construction meeting the following requirements:~~

- ~~1. Walls exposed to the outdoor atmosphere having a continuous water vapor retarder with a rating of 1 perm [57 ng/(s · m<sup>2</sup> · Pa)] or less with openings gasketed or sealed;~~
- ~~2. Openable windows and doors meeting the air leakage requirements of the *International Energy Conservation Code*, Section 402.4.2; and~~
- ~~3. Caulking or sealants are applied to areas, such as joints around window and door frames, between sole plates and floors, between wall ceiling joints, between wall panels, at penetrations for plumbing, electrical and gas lines and at other openings.~~

**SECTION M1701**

**GENERAL**

**M1701.1 Air supply Scope.** Liquid- and solid-fuel-burning appliances shall be provided with a supply of air for fuel combustion, draft hood dilution and ventilation of the space in which the appliance is installed, in accordance with the appliance manufactures installation instructions and NFPA 31, Section M1702 or Section M1703. The methods of providing combustion air in this chapter do not apply to fireplaces, fireplace stoves and direct-vent appliances. This chapter shall not apply to natural gas or liquefied petroleum applications, the requirements for combustion and dilution air for gas-fired appliances shall be in accordance with Chapter 24.

**DELETE THE REMAINING TEXT OF THE ENTIRE CHAPTER 17**

**Supporting Statement:**

This proposal was approved as submitted at the Public Hearings in FL.

These definitions have been deleted from Chapter 24 by way of the IFGC. They were used to determine if a structure needed the addition of outdoor air for combustion air.

Testing from the fuel gas industry has determined that "unusually tight", "unconfined space", and "confined space", are not factors of any relevance when determining if combustion air needs to be obtained from outdoors.

The provisions found in Chapter 17 are based on fuel gas provisions which are not germane to liquid or solid fuel appliances. NFPA 31 is already a reference document in the IRC so there is not an increased cost to construction. NFPA 31 is a maintained document that contains the relevant information for liquid and solid fuel appliances. As always the manufactures installation instructions are part of code requirements.



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<p>Submitted by: Guy Tomberlin, Fairfax County      Representing: VA Building and Code Officials Association (VBCOA) and VA Plumbing and Mechanical Inspectors Association (VPMIA)</p> <p>Address: 12055 Government Center Pkwy., Suite 630 Fairfax, VA 22030      Phone No.: 703-324-1611</p> <p>Regulation Title: Part I Construction USBC      Section No(s): Technical amendments to the IRC</p>		

Proposed Change:

**Proposal:**

Delete and substitute as follows

**P3007.1 Sewage ejectors or sewage pumps.** A sewage ejector, sewage pump, or grinder pump receiving discharge from a water closet shall have minimum discharge velocity of 1.9 feet per second (0.579 m/s) throughout the discharge piping to the point of connection with a gravity building drain, gravity sewer or pressure sewer system. A nongrinding pump or ejector shall be capable of passing a 1½-inch diameter (38 mm) solid ball, and the discharge piping shall be not less than 2 inches (51 mm) in diameter. The discharge piping of grinding pumps shall be not less than 1¼ inches (32 mm) in diameter. A check valve and a gate valve located on the discharge side of the check valve shall be installed in the pump or ejector discharge piping between the pump or ejector and the drainage system. Access shall be provided to such valves. Such valves shall be located above the sump cover or, where the discharge pipe from the ejector is below grade, the valves shall be accessibly located outside the sump below grade in an access pit with a removable access cover.

**Exception:** Macerating toilet systems shall be permitted to have the discharge pipe sized in accordance with manufacturer's instructions, but not less than 0.75 inch (19 mm) in diameter.

**P3007.2 Building drains below sewer (building subdrains).** Building drains which cannot be discharged to the sewer by gravity flow shall be discharged into a tightly covered and vented sump from which the contents shall be lifted and discharged into the building gravity drainage system by automatic pumping equipment.

**P3007.2.1 Drainage piping.** The system of drainage piping below the sewer level shall be installed and vented in a manner similar to that of the gravity system. Only such drains that must be lifted for discharge shall be discharged into sumps. All other drains shall be discharged by gravity.

**Exception:** Macerating toilet systems shall be permitted as an alternate to the sewage pump or ejector system. The macerating toilet shall comply with ASME A112.3.4 or CSA B45.9 and shall be installed in accordance with manufacturers' instructions.

**P3007.1 Building subdrains.** Building subdrains that cannot be discharged to the sewer by gravity flow shall be discharged into a tightly covered and vented sump from which the liquid shall be lifted and discharged into the building gravity drainage system by automatic pumping equipment or other approved method. In other than existing structures, the sump shall not receive drainage from any piping within the building capable of being discharged by gravity to the building sewer.

**P3007.2 Valves required.** A check valve and a full open valve located on the discharge side of the check valve shall be installed in the pump or ejector discharge piping between the pump or ejector and the gravity drainage system. Access shall be provided to such valves. Such valves shall be located above the sump cover required by Section P3007.3.2 or, where the discharge pipe from the ejector is below grade, the valves shall be accessibly located outside the sump below grade in an access pit with a removable access cover.

**P3007.3 Sump design.** The sump pump, pit and discharge piping shall conform to the requirements of Sections P3007.3.1 through P3007.3.5.

**P3007.3.1 Sump pump.** The sump pump capacity and head shall be appropriate to anticipated use requirements.

**P3007.3.2 Sump pit.** The sump pit shall be not less than 18 inches (457 mm) in diameter and 24 inches (610 mm) deep, unless otherwise approved. The pit shall be accessible and located such that all drainage flows into the pit by gravity. The sump pit shall be constructed of tile, concrete, steel, plastic or other approved materials. The pit bottom shall be solid and provide permanent support for the pump. The sump pit shall be fitted with a gas-tight removable cover adequate to support anticipated loads in the area of use. The sump pit shall be vented in accordance with Chapter 31.

**P3007.3.3 Discharge piping.** Discharge piping shall meet the requirements of Section P3307.2.

**P3007.3.4 Maximum effluent level.** The effluent level control shall be adjusted and maintained to at all times prevent the effluent in the sump from rising to within 2 inches (51 mm) of the invert of the gravity drain inlet into the sump.

**P3007.3.5 Ejector connection to the drainage system.** Pumps connected to the drainage system shall connect to the building sewer or shall connect to a wye fitting in the building drain a minimum of 10 feet (3048 mm) from the base of any soil stack, waste stack or fixture drain. Where the discharge line connects into horizontal drainage piping, the connection shall be made through a wye fitting into the top of the drainage piping.

**P3007.4 Sewage pumps and sewage ejectors.** A sewage pump or sewage ejector shall automatically discharge the contents of the sump to the building drainage system.

**P3007.5 Macerating toilet systems.** Macerating toilet systems shall comply with CSA B45.9 or ASME A112.3.4 and shall be installed in accordance with the manufacturer's installation instructions.

**P3007.6 Capacity.** A sewage pump or sewage ejector shall have the capacity and head for the application requirements. Pumps or ejectors that receive the discharge of water closets shall be capable of handling spherical solids with a diameter of up to and including 2 inches (51 mm). Other pumps or ejectors shall be capable of handling spherical solids with a diameter of up to and including 1 inch (25.4 mm). The minimum

capacity of a pump or ejector based on the diameter of the discharge pipe shall be in accordance with Table 3007.6.

**Exceptions:**

1. Grinder pumps or grinder ejectors that receive the discharge of water closets shall have a minimum discharge opening of 1.25 inches (32 mm).
2. Macerating toilet assemblies that serve single water closets shall have a minimum discharge opening of 0.75 inch (19 mm).

**TABLE 3007.6**

**MINIMUM CAPACITY OF SEWAGE PUMP OR SEWAGE EJECTOR**

<u>PIPE (inches)</u>	<u>(gpm)</u>
2	21
2 1/2	30
3	46

For SI: 1 inch = 25.4 mm, 1 gallon per minute = 3.785 L/m.

**Supporting Statement:**

This proposal was approved as submitted at the Public Hearings in FL.

These are the provisions from the IPC on sewage ejectors and sumps. They are much more complete and detailed than the current IRC text. This provides more complete guidance for the user.

Note: The following items are required to be included:

Purpose: The proponent shall clearly state the purpose of the proposed code change (e.g., clarify the Code; revise outdated material; substitute new or revised material for current provision of the Code; add new requirements to the Code; delete current requirements, etc.)

Reasons: The proponent shall justify changing the current code provisions, stating why the proposal is superior to the current provisions of the Code. Proposals that add or delete requirements shall be supported by a logical explanation which clearly shows why the current Code provisions are inadequate or overly restrictive, specifies the shortcomings of the current Code provisions and explains how such proposals will improve the Code.

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Bibliography: The proponent shall submit a bibliography of any substantiating material submitted with the code change proposal. The bibliography shall be published with the code change and the proponent shall make the substantiating materials available for review at the appropriate ICC office and during the public hearing.

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<b>Submitted by:</b> Guy Tomberlin, Fairfax County <b>Representing:</b> VA Building and Code Officials Association (VBCOA) and VA Plumbing and Mechanical Inspectors Association (VPMIA)  <b>Address:</b> 12055 Government Center Pkwy., Suite 630 Fairfax, VA 22030 <b>Phone No.:</b> 703-324-1611  <b>Regulation Title:</b> Part I Construction USBC <b>Section No(s):</b> Technical amendments to the IRC		

Insert RP 27 – 06/07

**CHAPTER 33**  
**STORM DRAINAGE****SECTION 3301**  
**GENERAL**

**P3301.1 Scope.** The provisions of this chapter shall govern the materials, design, construction and installation of storm drainage.

**SECTION 3302**  
**SUBSOIL DRAINS**

**3302.1 Subsoil drains.** Subsoil drains shall be open-jointed, horizontally split or perforated pipe conforming to one of the standards listed in Table 3302.1. Such drains shall not be less than 4 inches (102 mm) in diameter. Where the building is subject to backwater, the subsoil drain shall be protected by an accessibly located backwater valve. Subsoil drains shall discharge to a trapped area drain, sump, dry well or approved location above ground. The subsoil sump shall not be required to have either a gas-tight cover or a vent. The sump and pumping system shall comply with Section 3303.

**TABLE 3302.1**  
**SUBSOIL DRAIN PIPE**

<u>MATERIAL</u>	<u>STANDARD</u>
Asbestos-cement pipe	ASTM C 508
Cast-iron pipe	ASTM A 74; ASTM A 888; CISPI 301
Polyethylene (PE) plastic pipe	ASTM F 405; CSA B182.1; CSA B182.6; CSA B182.8
Polyvinyl chloride (PVC) Plastic pipe (type sewer pipe, PS25, PS50 or PS100)	ASTM D 2729; ASTM F 891; CSA B182.2; CSA B182.4
Stainless steel drainage systems, Type 316L	ASME A112.3.1
Vitrified clay pipe	ASTM C 4; ASTM C 700

**SECTION 3303**  
**SUMPS AND PUMPING SYSTEMS**

3303.1 Pumping system. The sump pump, pit and discharge piping shall conform to Sections 3303.1.1 through 3303.1.4.

3303.1.1 Pump capacity and head. The sump pump shall be of a capacity and head appropriate to anticipated use requirements.

3303.1.2 Sump pit. The sump pit shall not be less than 18 inches (457 mm) in diameter and 24 inches (610 mm) deep, unless otherwise approved. The pit shall be accessible and located such that all drainage flows into the pit by gravity. The sump pit shall be constructed of tile, steel, plastic, cast-iron, concrete or other approved material, with a removable cover adequate to support anticipated loads in the area of use. The pit floor shall be solid and provide permanent support for the pump.

3303.1.3 Electrical. Electrical outlets shall meet the requirements of Chapters 34 through 43.

3303.1.4 Piping. Discharge piping shall meet the requirements of Sections 3002.1, 3002.2, 3002.3 and 3003. Discharge piping shall include an accessible full flow check valve. Pipe and fittings shall be the same size as, or larger than, pump discharge tapping.

**SECTION R202**  
**DEFINITIONS**

SUBSOIL DRAIN. A drain that collects subsurface water or seepage water and conveys such water to a place of disposal.

2. Add standards to Chapter 43 as follows:

**ASTM**

<u>C508-00</u>	<u>Specification for Asbestos-Cement Underdrain Pipe</u>
<u>F405-97</u>	<u>Specification for Corrugated Polyethylene (PE) Tubing and Fittings</u>
<u>D2729-96a</u>	<u>Specification for Poly (Vinyl Chloride) (PVC) Sewer Pipe and Fittings</u>
<u>C4-03</u>	<u>Specification for Clay Drain Tile and Perforated Clay Drain Tile</u>

**CSA**

<u>B182.1-02</u>	<u>Plastic Drain and Sewer Pipe and Pipe Fittings</u>
<u>B182.6-02</u>	<u>Profile Polyethylene Sewer Pipe and Fittings for Leak-Proof Sewer Applications</u>
<u>B182.8-02</u>	<u>Profile Polyethylene Storm Sewer and Drainage Pipe and Fittings</u>

Reason: Current IRC is lacking the provisions for sumps, pumps, and any related equipment. These common items are found in residential construction across the US. These are vital provisions that will help ensure properly installed systems. This information was extracted from the IPC and modified as appropriate for residential applications.

**Supporting Statement:**

This proposal was approved as submitted at the Public Hearings in FL.

# DEPT. OF HOUSING AND COMMUNITY DEVELOPMENT REGULATORY CHANGE FORM

(Use this form to submit changes to building and fire codes)

<p>Address to submit to:</p> <p>DHCD, the Jackson Center 501 North Second Street Richmond, VA 23219-1321</p> <p>Tel. No. (804) 371 - 7150 Fax No. (804) 371 - 7092 Email: bhcd@dhcd.state.va.us</p>	<p><i>Aug. '06</i></p>	<p>Document No. _____</p> <p>Committee Action: _____</p> <p>BHCD Action: _____</p>
<p>Submitted by: Carrie Eddy _____ Representing: VDH/Office of Licensure and Certification (OLC)</p> <p>Address: 3600 W. Broad Street, Ste. 216, Richmond, VA 23230 _____ Phone No.: 804.367.2157 _____</p> <p>Regulation Title: Uniform Statewide Building Code (USBC) Section No(s): 2702.2 and 407.9 _____</p>		
<p>Proposed Change:</p> <p><b>407.9 Emergency power generators.</b> Emergency power generators shall be provided for Group 1-2 hospitals (including outpatient surgical centers), nursing facilities, and dedicated hospice facilities in accordance with Section 407.9.1, 407.9.2 and 407.9.3.</p> <ul style="list-style-type: none"> <li>• <b>407.9.1 Hospitals.</b> For the supply of power to essential electrical systems, the requirements of Part III, 517.30 through 517.35 of the National Electrical Code/2005 Edition shall apply.</li> <li>• <b>407.9.2 Nursing facilities, including extended care facilities such as dedicated hospice facilities.</b> For the supply of power to essential electrical systems, the requirements of Part III, 517.40 (B) through 517.44 of the National Electrical Code/ 2005 Edition shall apply, excluding 517.44 (B) Exception 2.</li> <li>• <b>407.9.3 Outpatient Surgical Centers.</b> For the supply of power to essential electrical systems, the requirements of Part III, 517.45 of the National Electrical Code/2005 Edition shall apply.</li> </ul> <p><b>2702.2 Where required: emergency and standby power systems shall be provided where required...</b></p> <ul style="list-style-type: none"> <li>• <b>2702.2.20 Emergency power</b> in hospitals, nursing facilities and outpatient surgical centers shall be supplied according to 407.9.1 through 407.9.3, as applicable.</li> </ul>		
<p>Supporting Statement: The condition, physical plant and the overall environment of inpatient hospitals, outpatient surgical centers, nursing facilities, and dedicate hospice facilities must be developed and maintained in such a manner that the safety and well being of patients, clients and residents is assured. Emergency power and lighting to limit internal disruption and to provide continuity of vital services at all times is, therefore, essential.</p> <p>The OLC proposes adding requirements to the USBC requiring that hospitals, nursing facilities, outpatient surgical hospitals, and dedicated hospice facilities have appropriate emergency power backup when normal operating conditions are disrupted due to power failures related to man-made or natural disasters. Currently, such stipulation is achieved through adherence to ancillary codes such as the Center for Medicare and Medicaid Services, the AIA Guidelines for Design and Construction of Health Care Facilities, and related NFPA standards. Continued reliance on national organization's standards for requiring generators is not prudent, as those standards are subject to change without due process in Virginia. The OLC believes that placing the appropriate requirement in the USBC assures that medical care facilities caring for the Commonwealth's sickest and most vulnerable citizens are prepared to provide at least the minimum emergency power should the need arise. It is OLC's understanding that all current operating hospitals, nursing facilities, dedicated hospice facilities and outpatient surgical centers have appropriate emergency power safeguards, therefore, it is not expected that approval and implementation of these proposed changes would result in added operating costs for current or future facilities.</p>		

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Address to submit to:  DHCD, the Jackson Center 501 North Second Street Richmond, VA 23219-1321  Tel. No. (804) 371 – 7150 Fax No. (804) 371 – 7092 Email: bhcd@dhcd.state.va.us	Document No. _____  Committee Action: _____  BHCD Action: _____
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Submitted by: R. Ronald Jordan Representing: Mid-Atlantic Fire Safety Construction Advisory Council-Virginia Fire Safety Committee  
 Address: c/o Virginia Masonry Association, P.O. Box 6783 Richmond, VA 23230 Phone No.: (804) 377-2080 (VMA phone)  
(804) 228-4506 (Jordan direct)

Regulation Title: Uniform Statewide Building Code Section No(s): Table 503, Section 504.2 and Section 903.2.5 of 2006 IBC

**Proposed Change:**

1. Revise Table 503 as follows:

Portion of IBC Table 503  
 Allowable Height and Building Areas

Group		Type of Construction								
		Type I		Type II		Type III		Type IV	Type V	
		A	B	A	B	A	B	HT	A	B
		UL	160	65	55	65	55	65	50	40
I-1	S	UL	9	4	3	4	3	4	3	2
	A	UL	55,000	10,000	10,000	16,500	10,000	18,000	10,500	4,500
I-1	S	UL	4	2	1	1	NP	1	1	NP
	A	UL	UL	15,000	11,000	12,000	NP	12,000	9,500	NP
I-2	S	UL	4	2	1	1	NP	1	1	NP
	A	UL	UL	15,000	11,000	12,000	NP	12,000	9,500	NP
I-3	S	UL	4	2	1	2	1	2	2	1
	A	UL	UL	15,000	10,000	10,500	7,500	12,000	7,500	5,000

Note: Groups I-2 (hospitals and nursing homes) and I-3 (prisons) shown for informational purposes only.

2. In Section 504.2, revise Exception No. 1 to read:

1. Fire areas with an occupancy in Group I-1 or I-2 of Type IIB, III, IV or V construction.

3. Remove exception to Section 903.2.5 which permits NFPA 13R and NFPA 13D sprinkler systems in Group I-1 occupancies.



Supporting Statement: This change will require that assisted living facilities (occupancy Group I-1) be built to the same type of construction standards presently required for hospitals and nursing homes (Group I-2). It will require a balanced approach to fire protection design resulting in the same level of fire safety in facilities housing this growing and fragile segment of the population as currently provided for patients in hospitals and residents of nursing homes. Adoption of the change will combine the benefits of passive and active fire protection for (1) fire containment, using non-combustible construction materials for facilities more than one story in height; (2) smoke detection and alarms; and (3) fire suppression, using sprinklers.

**DEPT. OF HOUSING AND COMMUNITY DEVELOPMENT REGULATORY CHANGE FORM**

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Submitted by: _____ Representing: _____		
Address: _____ Phone No.: _____		
Regulation Title: __USDC, Part 1, Virginia Construction Code__ Section No(s): _____ 707.14.1 _____		
<b>Proposed Change:</b>  Chapter 7  Fire-Resistant-Rated Construction  (no change to first two items)  <del>Delete Section 707.14.1 of the IBC.</del>  (remainder of items unchanged)		
<b>Supporting Statement:</b>  While the legacy BOCA code did not require elevator shaft protection this life safety issue of protecting fire-rated corridors from smoke in elevator shafts in high rise buildings is addressed in the IBC. Since the inception of the IBC and through the last two code cycles elevator lobby separation has been thoroughly debated and included in each edition of the IBC through the last two code cycles. In so doing, the ICC established the minimum national requirements for life safety in the IBC relating to the need for elevator shaft protection in high rise buildings.  The IBC incorporates over 200 trade-offs within the prescriptive requirements of the building code. Exceptions 1 and 4 to Section 707.14.1 in the IBC 2003 established specific sprinkler trade-offs for this section of the building code. . Exception 4 limits the requirement to provide elevator lobbies to buildings over 4 stories with elevators opening fire rated corridors, with the addition of sprinklers in I, R, and H occupancies. Other occupancies were allowed sprinkler trade-offs, deleting the requirement to provide fire rated corridors if sprinklered.  The IBC 2006 has limited the requirement in Exception 4 in Section 707.14.1 to buildings over 75 feet. The 2006 IBC recognizes the level of fire protection and life safety afforded in fully sprinklered buildings less than 75 feet in height and has exempted those building from the lobby requirement.  Given the IBC 2006 will again establish the minimum national standards for life safety and that the ICC staff works to discourage amendments to the IBC which create many variations in the building codes from state to state, Virginia, by adopting this amendment, would align the Virginia Building Code with the minimum life safety standards provided for in the IBC 2006 for high rise buildings.  In addition, adding the provisions of IBC 2006 707.14.1 will also provide defend in place protection in I-3 occupancies previously not addressed in the VBC.		

**DEPT. OF HOUSING AND COMMUNITY DEVELOPMENT REGULATORY CHANGE FORM**  
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Submitted by: Frank Hertzog _____ Representing: Smoke Safety Council _____  Address: 6775 SW 111 <sup>th</sup> Ave, Ste 10, Beaverton, OR 97008 _____ Phone No.: 208 639-7860 _____  Regulation Title: Executive Director _____ Section No(s): 707.14.1, Exception 4 _____
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Proposed Change:

**707.14.1 Elevator lobby. No change to current language.**

**Exceptions:**

1. No change to current language in IBC 2006.
2. No change to current language in IBC 2006.
3. No change to current language in IBC 2006.
4. In other than Group I-3, I-2, and buildings having occupied floors located more than 75 feet (22 860 mm) above the lowest level of fire department vehicle access, enclosed elevator lobbies are not required where the building is protected by an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2.
5. No change to current language in IBC 2006.
6. No change to current language in IBC 2006.

Supporting Statement:

This change adds I-2 (healthcare) occupancies back into Exception 4, and corrects an administrative error in the IBC 2003 code. I-2's were included in this exception in IBC 2000, and were left out of IBC 2003. I-2 occupancies cannot evacuate in the event of a fire, and must practice defend in place strategies to protect patients and staff. These strategies include evacuating patients into smoke compartments bounded by smoke barriers, as defined in the building code. The building code clearly defines smoke compartments as requiring protection at all walls and at the floor and ceiling. Hospital smoke compartment integrity cannot be maintained if unprotected elevators penetrate these spaces floor to floor. This change assures that protection is provided for patients from the effects of fire and smoke. For this reason, I-2s, like I-3s (confinement facilities), require special consideration in providing this protection, and should be included as one of the occupancies addressed in this exception, as indicated by the change submitted.

Additon of the I-2 occupancies in exception 4 of Section 707.14.1 was also unanimously accepted for inclusion in the 2009 IBC by the fire safety code committee at the National ICC code hearings in Orlando in September of this year.

**Vernon Hodge**

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**From:** Ballard, Brooks [Brooks.Ballard@vadoc.virginia.gov]  
**Sent:** Tuesday, October 17, 2006 9:08 AM  
**To:** Vernon Hodge  
**Cc:** Jones, Bert; Hawkins, David; Casey, Robert; Les Harcum  
**Subject:** Bldg Code VUSBC revisions for 2006 code.doc

**Attachments:** Bldg Code VUSBC revisions for 2006 code.doc



Bldg Code VUSBC  
revisions for ...

Vernon,

Here are our code requests that we talked about in our meeting with you on. Meeting participants were Dave Hawkins, Bob Casey, Bert Jones, Les Harcum, you and me. Email addresses are in the cc line above.

As discussed yesterday, we will be working on the forms/supporting statements for them individually.

Thanks,  
Brooks

<<Bldg Code VUSBC revisions for 2006 code.doc>>

CONTINUATIONS: (most of these were in originally in BOCA and were in the 2000 and 2003 VUSBC but are not in IBC 2006)

707.2 Shaft Enclosure Required (from BOCA and 2003 VUSBC) - (Exception 1 does not cover it)

*Exception 14. A floor opening that complies with Section 408.5 in an occupancy in Group I-3.*

*Exception 15. Noncombustible shafts connecting communicating floor levels in an occupancy in Group I-3 where the area complies with Section 408.5. Where additional stories are located above or below, the shaft shall be permitted to continue with fire and smoke damper protection provided at the fire resistance rated floor/ceiling assembly between the noncommunicating stories.*

715.4.3 Door assemblies in corridors and smoke barriers. (from 2003 VUSBC)

*Exception 4: Horizontal sliding doors in smoke barriers that comply with 408.3 are permitted in smoke barriers in occupancies in Group I-3.*

715.5.4 (from BOCA & 2003 VUSBC) *Exception : Security glazing protected on both sides by an automatic sprinkler system shall be permitted in doors and windows in smoke barriers in occupancies in Group I-3 and other groups within penal facilities. Individual panels of glazing shall not exceed 1296 sq in (.84 sq meters), shall be in a gasketed frame and installed in such a manner that the framing system will deflect without breaking (loading) glazing before the sprinkler system operates. The sprinkler system shall be designed to wet completely the entire surface of the affected glazing when actuated.*

906.1 General (Portable Fire Extinguishers) (from BOCA 1996 Sect. 921.2)

*Exception 1: In all occupancies in Use Group I-3 at staff locations and access to portable extinguishers shall be permitted to be locked.*

907.9 (from VUSBC 2003) *Location of appliances in Group I-3 occupancies. Wall-mounted alarm notification appliances in Group I-3 occupancies shall be permitted to be a maximum of 120 inches (3048 mm) above the floor or ground, measured to the bottom of the appliance and shall otherwise comply with Section 702.3.3.1 of ICC A117.1.*

909.6 (from 2003 VUSBC) *Pressurization method. When approved by the building official, the means of controlling smoke shall be permitted by pressure differences across smoke barriers. Maintenance of a tenable environment is not required in the smoke-control zone of fire origin.*

*1008.1.8.8 Locking arrangements in correctional facilities. In occupancies in Groups A\_3, A-4, B, E, F, I-3, M and S within penal facilities, doors in means of egress serving rooms or spaces occupied by persons whose movements must be controlled for security reasons shall be permitted to be locked in equipped with egress control devices which shall unlock manually and by at least one of the following means:*

- 1. Actuation of an automatic fire suppression system required by Section 903.2*
- 2. Actuation of a key-operated manual alarm station required by Section 907.2*
- 3. A signal from a central control station*

Table 1017.1 Corridor Fire-Resistance Rating (from BOCA and 2003 VUSBC)  
Occupancy I – With Sprinkler System – *required rating 0 (not 1 hour)*

ADDITIONS (new requests):

#### Chapter 2 Definitions

*Penal Facility. A building or groups of buildings occupied by persons under restraint or security due to criminal arrest or incarceration. These buildings or spaces may be designated as Use A-2, A-3, B, E, F, I-3, M and S.*

*Sallyport. A security vestibule with two or more doors where the intended purpose is to prevent continuous and unobstructed passage by allowing the release of only one door at a time.* (The allowance for sallyport is in 408 but the definition did not make it)

308.4. Group I-3. This occupancy shall include buildings, ~~and~~ structures or spaces within buildings that are inhabited by more than five persons who are under restraint or security. An I-3 facility is occupied by persons who are generally incapable of self-preservation due to security measures not under the occupants' control. *Buildings or spaces in this group not used for housing shall be permitted to be designated as Use A-2, A-3, B, E, F, I-3, M and S within penal facilities.* This group shall include.....

408.3.6 One of the required vertical exit enclosures in each building shall be permitted to have security glazing installed .....

408.3.2 Sliding Doors. Where doors in a means of egress are of the horizontal sliding type, the force to slide the door, *when unlocked*, to its fully open position.....

408.8 Windowless Building. (Last sentence) .....Windowless buildings shall be provided with an engineered smoke control system to provide ventilation (mechanical or natural) in accordance with Section 909.8 for each windowless smoke compartment.

715.4 Fire door and shutter assemblies.

*Exception 3: In Group I-3 and other Groups within penal facilities metal listing labels shall be permitted to be replaced with mylar listing labels and the metal listing labels and door listing documentation kept on file at the facility.*

903.2.5 Group I. An automatic sprinkler system shall be provided throughout buildings within Group I fire area.

*Exception 2: Plumbing chases not exceeding 9 SF in floor area in group I-3 occupancies.*

*Exception 3: In occupancies in Group I-3 and other groups within penal facilities, refrigerator rooms not exceeding 800 SF or freezer rooms not exceeding 1600 SF.*

*Exception 4: Shower stalls and drying areas in Group I-3 occupancies.*

*Exception 5: Under open grating stairs in Group I-3 occupancies and other groups within penal facilities.*

#### 1008.1.1 Size of Doors

*Exception 9: Within penal facilities, guard tower cabs and other control point areas, access shall be permitted to be a hatch or trap door not less than 10 SF in area through the floor and having a minimum dimension of not less than 2 feet.*

#### 1008.1.2 Door Swing

*Exception 2. Group I-3, other groups within a penal facility, and occupancies used as a place of detention.*

#### 1008.1.8.3 Locks and Latches

(exception 1 doesn't cover it like BOCA)

*Exception 1: ~~Places of detention or restraint.~~ Penal facilities.*

#### 1008.1.8.5 Unlatching.

*Exception 1. ~~Places of detention or restraint.~~ Penal facilities.*

#### 1009.3. Stair Treads and Risers

(from BOCA)

*Exception 6: Stairways in penal facilities service guard towers, observation stations and control rooms not more than 250 SF (23 cu meters) in area shall be permitted to have risers not exceeding 8 inches (203 mm) in height and treads not less than 9 inches (229 mm) in depth.*

#### 1009.3.3 Profile.

*Exception 2: ~~Solid~~ Completely open or nonsolid risers are not required shall be permitted for occupancies in Group I-3 and other groups within penal facilities.*

*1009.12 Ships Ladders. Ships ladders are limited to an element of a means of egress in guard towers, observation or control room not more than 250 SF (23sq m) in area located in a penal facility and which serves not more than 3 occupants and for access to unoccupied roofs.*

*1009.12.1 Handrails of ships ladders. Handrails shall be provided on both sides of ships ladders.*

*1009.12.2 Treads and risers of ships ladders. Ships ladders shall have a minimum projected tread of 5 inches (127 mm), a minimum tread depth of 8.5*

*inches (216 mm), a minimum tread width of 15 inches (612 mm) and a maximum riser height of 9.5 inches (241mm).*

#### 1011.1 Exit Signs

Exception 4: Exit signs are not required in sleeping rooms, ~~areas~~ dayrooms or dormitory spaces in occupancies in Group I-3.

Table P403.1 Minimum Number of Required Plumbing Fixtures

Occupancy	Description	Water Closets	Lavatories
I-3	Employees	1 per 25	1 per 35
	Reformatories, detention centers, and correctional centers, or penal facility dormitories		

P403.4 Required public toilet facilities.

*Exception: Toilet and lavatory facilities shall not be required for inmate dining halls in penal facilities.*

(Possibly - look at proposed language for 2006 VUSBC for changes from the 2003)

#### 1004.1 VUSBC

*Exception: Use Group I-3 and other groups within penal facilities.*



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<b>Submitted by:</b> M. Nasir Nasim, PE, PMP  <b>Address:</b> 600 Fifth St, NW, Washington, DC 20001  <b>Regulation Title:</b> Virginia Uniform Statewide Building Code (VUSBC) <b>Section No(s):</b> Chapter 9 of International Building Code (IBC) and Chapter 35 of IBC	
<b>Representing:</b> Washington Metropolitan Area Transit Authority (W.M.A.T.A.)  <b>Phone No.:</b> (202) 962-1397	
<b>Proposed Change:</b>  <b>Chapter 9 – Fire Protection Systems:</b>  <b>Include:</b>  Fire protection requirements for the following transit and passenger rail systems shall be in accordance with NFPA 130: <ol style="list-style-type: none"><li>1. New Passenger Rail Systems and extensions to existing passenger rail systems;</li><li>2. New Underground, Surface, and Elevated Fixed Guideway Transit Systems, including trainways, fixed guideway transit stations, and vehicle maintenance and storage areas and extensions to existing fixed guideway systems;</li><li>3. Life safety from fire in fixed guideway transit stations, trainways, and outdoor vehicle maintenance and storage areas;</li><li>4. Emergency procedures for new and existing transit and rail systems as identified in 1, 2 and 3 above</li></ol> <b>Chapter 35 – Referenced Standards</b>  <b>Include:</b>  Reference to NFPA 130 – Standard for Fixed Guideway and Passenger Rail Systems, 2003 Edition. (NFPA is acronym for National Fire Protection Association - <a href="http://www.nfpa.org">www.nfpa.org</a> )	
<b>Supporting Statement:</b>  Fire Protection Requirements of the VUSBC and IBC 2003 are not applicable to Fixed Guideway Transit and Passenger Rail Systems. Requirements of the NFPA 130 are more suited too, and more specifically apply to Fixed Guideway Transit and Passenger Rail Systems, reflect industry best practices and results of scientific and engineering testing and analysis.	

Attn: State Building Code Administrator

Dear Sir:

The Washington Metropolitan Area Transit Authority (WMATA), created effective February 20, 1967, is an interstate compact agency and, by the terms of its enabling legislation, is an agency and instrumentality of the District of Columbia, State of Maryland, and Commonwealth of Virginia. WMATA was created by the aforementioned states and the District of Columbia to plan, finance, construct and operate a comprehensive mass transit system for the Washington Metropolitan Area.

WMATA is empowered by the signatory parties to:

1. Plan, Develop, Finance and Cause to be operated improved transit facilities, in coordination with transportation and general development planning for the Zone, as part of a balanced regional system of transportation, utilizing to their best advantage the various modes of transportation
2. To coordinate the operation of the public and privately owned or controlled transit facilities, to the fullest extent practicable, into a unified regional transit system without unnecessary duplicating service
3. To serve such other regional purposes and to perform such other functions as the signatories may authorize by appropriate legislation.

In the State of Virginia, at the present time WMATA is the technical manager and eventual owner and operator of the extension of the Metro system to the Dulles Airport. This project is scheduled in two separate contracts. The first contract is ongoing and consists of the extension of the Metro system from the West Falls Church Station to Wiehle Avenue in Fairfax County. This almost \$2 Billion project currently in design stage, is expected to break ground this year and completion of approximately 12 miles of alignment is expected in 2011. This 12 miles of alignment consists of stations, buildings, tunnels, aerial structures, and at grade structures. More information is available on our website [www.wmata.com](http://www.wmata.com).

During the design effort for the Dulles Contract, WMATA noticed a deficiency in the building codes promulgated by the State of Virginia. The deficiency arises from the fact that current provision pertaining to FIRE PROTECTION in the 2003 International Building Code (IBC) or the Virginia Uniform Statewide Building Code (VUSBC) are not applicable to transit facilities and in particular underground transit structures. Fire protection requirements for transit and passenger railway facilities are more accurately depicted in the National Fire Protection Association Document # 130, referred to as NFPA 130. Therefore, we are proposing that the VUSBC include an amendment to Chapter 9 of the IBC. The proposed amendment is described in the attached Regulatory Code Change Form.

We were informed by your office that the 2006 edition of the VUSBC is scheduled to publish in 2008, at which time most of the construction on our major project in Virginia would be ongoing or close to completion. Hence, in the interim we request that you notify Building Officials and Inspectors in the County of Fairfax of the pending change and the necessity to maintain compliance with NFPA 130 during this transient period as construction on the Dulles Corridor Metrorail Project (DCMP) is ongoing.

We share your commitment to the citizens of Virginia and the general public at large and request that you support our effort to improve safety and enhance value for our customers.

Very truly yours,

M. Nasir Nasim, PE, PMP  
Office of Chief Engineer- Facilities  
Department of Planning, Development, Engineering and Construction  
WMATA

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**DEPT. OF HOUSING AND COMMUNITY DEVELOPMENT REGULATORY CHANGE FORM**  
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<p>Address to submit to:</p> <p>DHCD, the Jackson Center 501 North Second Street Richmond, VA 23219-1321</p> <p>Tel. No. (804) 371 - 7150 Fax No. (804) 371 - 7092 Email: bhcd@dhcd.state.va.us</p>		<p>Document No. _____</p> <p>Committee Action: _____</p> <p>BHCD Action: _____</p> <p align="center"><i>10/24/06</i></p>
<p>Submitted by: <u>William J. Hall</u> Representing: <u>VA Building and Code Officials Association</u></p> <p>Address: <u>P.O. Box 12164 Richmond VA 23241</u> Phone No.: <u>804-649-8471</u></p> <p>Regulation Title: <u>Uniform Statewide Building Code</u> Section No(s): <u>903.3.1.2.2</u></p>		
<p>Proposed Change: revise to read</p> <p><b>903.3.1.2.2 Attics.</b> Sprinkler protection <u>in accordance with 903.3.1.1</u> shall be provided for attics in buildings of Type III, IV or V construction in the following occupancies.</p> <ol style="list-style-type: none"><li>1. Group R-2 which are designed, or developed and marketed to senior citizens, 55 years of age or older.</li><li>2. Group I-1.</li></ol>		

**Supporting Statement:**

As written, this section does not give any guidance on which standard the sprinkler protection in the attic is designed to. It is assumed to be in accordance with NFPA 13. This added language will provide a clear intent of design. In addition, an attic which is built with non-combustible material would be allowed to take advantage of exception #4 in 903.3.1.1.1 Exempt locations.

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<p>Submitted by: <u>Cheri Hainer</u> Representing: <u>City of Virginia Beach</u></p> <p>Address: <u>2405 Courthouse Drive Bldg 2 Room 100 Va Beach VA 23456</u> Phone No.: <u>757-385-4211</u></p> <p>Regulation Title: <u>USBC</u> Section No(s): <u>NEW Section 912 IBC &amp; 511 IFC</u></p>		

Proposed Change:

**[F] SECTION 902 DEFINITIONS**

**Emergency Communication Equipment** - Emergency communication equipment, includes, but is not limited to, two-way radio communications, signal booster, bi-directional amplifiers, radiating cable systems or internal multiple antenna, or a combination of the foregoing.

**Emergency Public Safety Personnel** - Emergency public safety personnel includes firefighters, emergency medical personnel, law-enforcement officers and other emergency public safety personnel routinely called upon to provide emergency assistance to members of the public in a wide variety of emergency situations, including, but not limited to, fires, medical emergencies, violent crimes and terrorist attacks.

**[F] SECTION 912 IN-BUILDING EMERGENCY COMMUNICATIONS COVERAGE**

**912.1 General.** In-building emergency communication equipment to allow emergency public safety personnel to send and receive emergency communications shall be provided in new buildings and structures in accordance with this section.

**EXCEPTIONS:**

1. Buildings of Use Groups A-5, I-4, within dwelling units of R-2, R-3, R-4, R-5, and U.
2. Buildings of Type IV and V construction without basements.
3. Above grade single story buildings of less than 20,000 square feet.
4. Buildings or leased spaces occupied by federal, state, or local governments, or the contractors thereof, with security requirements where the building official has approved an alternative method to provide emergency communication equipment for emergency public safety personnel.
5. Where the owner provides technological documentation from a qualified individual that the structure or portion thereof is exempt from the requirements of this section.

**912.2 Where required.** For localities utilizing public safety wireless communications, new buildings and structures shall be pre-wired to accommodate and perpetuate continuous emergency communication through the installation of radiating coaxial cable.

**912.2.1 Installation.** Radiating coaxial cable or equivalent shall be installed in dedicated conduit compatible for the installation and other provisions of this code.

**912.2.2 Inspection.** In accordance with Section 113.3, all installations shall be inspected prior to concealment.

**912.3 Other required installations.** In addition to the requirements of Section 912.1, in-building emergency communications shall also be required in certain special use occupancies as indicated in Table 912.3.1.

**TABLE 912.3.1  
ADDITIONAL EMERGENCY COMMUNICATION SYSTEMS**

<u>SECTION</u>	<u>SUBJECT</u>
<u>402.13.1</u>	<u>Covered malls</u>
<u>403.8.1</u>	<u>High-rise buildings</u>
<u>406.3.10.1</u>	<u>Motor vehicle related occupancies</u>
<u>507.9</u>	<u>Unlimited area buildings</u>
<u>IFC</u>	<u>Emergency communication equipment requirements as set forth in Section 511 of the International Fire Code</u>

**912.4 Acceptance Test.** Upon completion of installation, after providing reasonable notice to the owner or their representative, the fire official, police chief, and/or their agents shall have the right during normal business hours, or other mutually agreed upon time, to enter onto the property to conduct field tests to verify that the required level of radio coverage is present at no cost to the owner. Any noted deficiencies shall be provided in an inspection report to the owner to the owner or the owner's representative.

Applicable sections referenced in Table 912.1.1, found in the *International Building Code*.

Section 402.13.1. Covered mall buildings shall be provided with in-building coverage for emergency communications in accordance with Section 912.

Section 403.1 exception 6. Within dwelling units in Group R-2 in accordance with Section 310.1.

Section 403.8.1. High-rise buildings shall be provided with in-building coverage for emergency communications in accordance with Section 912.

Section 406.3.10.1. Motor vehicle related occupancies shall be provided with in-building coverage for emergency communications in accordance with Section 912.

Section 507.9: Unlimited area buildings shall be provided with in-building coverage for emergency communications in accordance with Section 912.

Applicable sections referenced in Table 912.1.1, found in the *International Fire Code*.

SECTION 511 MAINTENANCE OF IN-BUILDING EMERGENCY COMMUNICATION RADIO SYSTEMS EQUIPMENT

511.1 General. In-building emergency communication equipment shall be maintained in accordance with the USBC and the provisions of this section.

511.2 Additional In-Building Emergency Communications Installations. If it is determined by the locality that amplification of their emergency communication system is needed, the building owner shall allow the locality access as well as provide appropriate space within the building to install and maintain necessary additional communication equipment by the locality. If the building owner denies the locality access and /or appropriate space, the building owner shall be responsible for the installation and maintenance of these additional systems.

511.3 Field Tests. After providing reasonable notice to the owner or their representative, the fire official, police chief, and/or their agents shall have the right during normal business hours, or other mutually agreed upon time, to enter onto the property to conduct field tests to verify that the required level of radio coverage is present at no cost to the owner. Any noted deficiencies shall be provided in an inspection report to the owner to the owner or the owner's representative.

Supporting Statement:

In 2002, on behalf of my locality, I made a proposal to require the pre-wiring of buildings to supplement and enhance the locality's communication system. Other localities were experiencing the same issues and several joined the effort to codify the issue. In 2003, General Assembly Joint Bill 588 required the State Fire Marshall's office (Fire Programs) to study the necessity for appropriate code provisions. A task group representing all affected parties, such as Building and Fire Officials, Building Owners, Contractors, and Radio Systems Technical Advisors meet to discuss this issue and determined there was a need for this to be referenced in the Uniform Statewide Building Code. Based on the outcome of that study as well as the language in House Bill 2529 2003, several versions of this code provision were developed and presented to the Board of Housing. However, there were numerous undetermined construction and cost factors involved and no consensus between the code, construction and building owners communities could be reach and the codes were not adopted. But the concern for the emergency public safety personnel is still prevalent, so the interested parties have come back to the table and arrived at this compromise as a first step to addressing this issue.

**Hodge, Vernon**

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**From:** Cheri B. Hainer [CHainer@vbgov.com]  
**Sent:** Friday, January 26, 2007 3:35 PM  
**To:** Rodgers, Emory; Hodge, Vernon; vpffd@aol.com; Mark Ingrao; Michael Reilly; Mike Toalson; Altizer, Ed; harris@meckcom.net; ccsingleton@aol.com; Duncan Abernathy; Dave Johnston; Witt, Rick; rcgva@comcast.net; wernerc@charlottesville.org; ssterling@aoba-metro.com; Dale.Johnson@alexandriava.gov  
**Subject:** RE: In-building emergency communications

For clarification.

1. The exception is for Type IV and Type V construction. Table 503 does allow Type IV to be 4 stories, but Type V can only be 4 stories if there is a sprinkler system - but it would still be classified as Type V so it would be exempt.
2. We do need technical support. Several have mentioned wanted the cable to be protected in conduit but then I have seen where it may not be needed.
3. As previously stated, I followed the IBC format for sections in Chapter 9, specifically sprinklers and a similar table (Table 903.2.13) is located in the sprinkler requirements. It is up to the group whether to delete it or not.
4. Again, mirrors provisions in IBC for sprinkler requirements.
5. I agree that it needs to be referenced in SFPC. IFC chapter 5 deals with special fire services.

Please let me know if I can help in any way. Thanks

---

**From:** Rodgers, Emory [mailto:Emory.Rodgers@dhcd.virginia.gov]  
**Sent:** Friday, January 26, 2007 2:54 PM  
**To:** Cheri B. Hainer; Hodge, Vernon; vpffd@aol.com; Mark Ingrao; Michael Reilly; Mike Toalson; Altizer, Ed; harris@meckcom.net; ccsingleton@aol.com; Duncan Abernathy; Dave Johnston; Witt, Rick; rcgva@comcast.net; wernerc@charlottesville.org; ssterling@aoba-metro.com; Dale.Johnson@alexandriava.gov  
**Subject:** In-building emergency communications

**Comments:**

1. 912.1: Exception #1 for R-2 dwelling units would not cover 4 story combustible/wood frame apartments that to my knowledge wasn't deemed to be a problem. So for everyone do you need to have an exception for 4 story or less wood framed residential buildings?
2. 912.2.1: Technical question for the experts. Is their conduit that is compatible with the radiating coaxial cable?
3. 912.3, Table 912.3.1: Can this be deleted because 912.1 already include all the Chapter 4 buildings as they aren't Exceptions?
4. Applicable sections on page 2 of code change: not sure this text is necessary too?
5. Section 511 IFC: Believe would need to be in the SFPC as USBC is for construction and not maintenance and inspections thereafter.

Will have staff review these comments. Goal is to have as-near consensus and the code change as-near final form as possible so can be distributed to other stakeholders.



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<p>Submitted by: Guy Tomberlin, Fairfax County      Representing: VA Building and Code Officials Association (VBCOA) and VA Plumbing and Mechanical Inspectors Association (VPMIA)</p> <p>Address: 12055 Government Center Pkwy., Suite 630 Fairfax, VA 22030      Phone No.: 703-324-1611</p> <p>Regulation Title: Part I Construction USBC      Section No(s): Mechanical Code (IMC) Technical Amendments</p>		

Proposed Change:

Submit ICC code change proposal M-44 06/07.

**M44-06/07**

403.1, 403.2, 403.2.1, 403.2.2, 403.3, 403.3.1, 403.3.1.1 (New), 403.3.2.3.1 (New), 403.3.2.3.2 (New), 403.3.2.3.3 (New), 403.3.2.3.4 (New) 403.3.1.2 (New), Table 403.1 (New), 403.3.1.3 (New), 403.3.2.1 (New), 403.3.2.2 (New), 403.3.2.3 (New), 403.3.3, Table 403.3, 403.3.4, 403.4 (New), 403.5 (New), 403.6 (New), 403.7 (New), 404.2, 202 (New)

Proponent: Steven Ferguson, ASHRAE

**1. Revise as follows:**

**403.1 Ventilation system.** Mechanical ventilation shall be provided by a method of supply air and return or exhaust air. The amount of supply air shall be approximately equal to the amount of return and exhaust air. The amount of supply air shall be approximately equal to the amount of return and exhaust air. The system shall not be prohibited from producing negative or positive pressure. The system to convey ventilation air shall be designed and installed in accordance with Chapter 6.

~~Ventilation supply systems shall be designed to deliver the required rate of supply air to the occupied zone within an occupied space. The occupied zone shall have boundaries measured at 3 inches (76 mm) and 72 inches (1829 mm) above the floor and 24 inches (610 mm) from the enclosing walls.~~

**403.2 Outdoor air required.** ~~The minimum ventilation rate of required outdoor airflow rate shall be determined in accordance with Section 403.3. Ventilation supply systems shall be designed to deliver the required rate of outdoor airflow to the breathing zone within each occupiable space.~~

Exception: Where the registered design professional demonstrates that an engineered ventilation system design will prevent the maximum concentration of contaminants from exceeding that obtainable by the rate of outdoor air ventilation determined in accordance with Section 403.3, the minimum required rate of outdoor air shall be reduced in accordance with such engineered system design.

**403.2.1 Recirculation of air.** The outdoor air required by Section 403.3 shall not be recirculated. Air in excess of that required by Section 403.3 shall not be prohibited from being recirculated as a component of supply air to building spaces, except that:

1. Ventilation air shall not be recirculated from one dwelling unit to another or to dissimilar occupancies.
2. Supply air to a swimming pool and associated deck areas shall not be recirculated unless such air is dehumidified to maintain the relative humidity of the area at 60 percent or less. Air from this area shall not be recirculated to other spaces where 10 percent or more of the resulting supply airstream consists of air recirculated from these spaces.
3. Where mechanical exhaust is required by Note b in Table 403.3, recirculation of air from such spaces shall be prohibited. All air supplied to such spaces shall be exhausted, including any air in excess of that required by Table 403.3.
4. Where mechanical exhaust is required by Note h in Table 403.3, mechanical exhaust is required and recirculation is prohibited where 10% or more of the resulting supply airstream consists of air recirculated from these spaces.

**403.2.2 Transfer air.** Except where recirculation from such spaces is prohibited by Table 403.3, air transferred from occupiable occupied spaces is not prohibited from serving as makeup air for required exhaust systems in such spaces as kitchens, baths, toilet rooms, elevators and smoking lounges. The amount of transfer air and exhaust air shall be sufficient to provide the flow rates as specified in Sections 403.3 and 403.3.1. The required outdoor airflow rates specified in Table 403.3 shall be introduced directly into such spaces or into the occupied spaces from which air is transferred or a combination of both.

**403.3 Ventilation Outdoor airflow rate.** Ventilation systems shall be designed to have the capacity to supply the minimum outdoor airflow rate determined in accordance with this section. ~~Table 403.3 based on the occupancy of the space and the occupant load or other parameter as stated therein.~~ The occupant load utilized for design of the ventilation system shall not be less than the number determined from the estimated maximum occupant load rate indicated in Table 403.3. Ventilation rates for occupancies not represented in Table 403.3 shall be those for a listed occupancy classification that is most similar in terms of occupant density, activities and building construction; or, shall be determined by an approved engineering analysis. The ventilation system shall be designed to supply the required rate of ventilation air continuously during the period the building is occupied, except as otherwise stated in other provisions of the code.

$$V_{bz} = R_p P_z + R_a A_z \quad (\text{Equation 4-1})$$

**Where:**

$A_z$  = zone floor area: the net occupiable floor area of the space or spaces in the zone.

$P_z$  = zone population: the number of people in the space or spaces in the zone.

$R_p$  = people outdoor air rate: the outdoor airflow rate required per person from Table 403.3

$R_a$  = area outdoor air rate: the outdoor airflow rate required per unit area from Table 403.3

**403.3.1.2 Zone air distribution effectiveness.** The zone air distribution effectiveness ( $E_z$ ) shall be determined using Table 403.1.

**TABLE 403.1  
ZONE AIR DISTRIBUTION EFFECTIVENESS**

Air Distribution Configuration	$E_z$
Ceiling or floor supply of cool air	1.0 <sup>f</sup>
Ceiling or floor supply of warm air and floor return	1.0
Ceiling supply of warm air and ceiling return	0.8 <sup>g</sup>
Floor supply of warm air and ceiling return	0.7
Makeup air drawn in on the opposite side of the room from the exhaust and/or return	0.8
Makeup air drawn in near to the exhaust and/or return location	0.5
<p>a. "Cool air" is air cooler than space temperature.</p> <p>b. "Warm air" is air warmer than space temperature.</p> <p>c. "Ceiling" includes any point above the breathing zone.</p> <p>d. "Floor" includes any point below the breathing zone.</p> <p>e. "Makeup air" is air supplied or transferred, to a zone to replace air removed from the zone by exhaust or return systems.</p> <p>f. Zone air distribution effectiveness of 1.2 shall be permitted for systems with floor supply of cool air and ceiling return, provided low-velocity displacement ventilation achieves unidirectional flow and thermal stratification.</p> <p>g. Zone air distribution effectiveness of 1.0 shall be permitted for systems with ceiling supply of warm air, provided supply air is less than 15°F (8°C) above space temperature and provided that the 150 fpm (0.8 m/s) supply air jet reaches to within 4.5 ft (1.4 m) of floor level.</p>	

**403.3.1.3 Zone outdoor airflow.** The zone outdoor airflow rate ( $V_{oz}$ ) shall be determined in accordance with Equation 4-2.

$$V_{oz} = V_{bz}/E_z \quad (\text{Equation 4-2})$$

**4. Delete and substitute as follows:**

**403.3.2 Common ventilation system.** Where spaces having different ventilation rate requirements are served by a common ventilation system, the ratio of outdoor air to total supply air for the system shall be determined based on the space having the largest outdoor air requirement or shall be determined in accordance with the following formula:  

$$Y = X/(1 + X - Z) \quad (\text{Equation 4-1})$$

**Where**

$Y = V_{ot}/V_{st}$  = Corrected fraction of outdoor air in system supply.

$X = V_{on}/V_{st}$  = Uncorrected fraction of outdoor air in system supply.

$Z = V_{oc}/V_{sc}$  = Fraction of outdoor air in critical space. The critical space is that space with the greatest required fraction of outdoor air in the supply to this space.

$V_{ot}$  = Corrected total outdoor airflow rate.

$V_{st}$  = Total supply flow rate, i.e., the sum of all supply for all branches of the system.

$V_{on}$  = Sum of outdoor airflow rates for all branches on system.

$V_{oc}$  = Outdoor airflow rate required in critical spaces.

$V_{sc}$  = Supply flow rate in critical space.

**403.3.2 System outdoor airflow.** The outdoor air required to be supplied by each ventilation system shall be determined in accordance with Section 403.3.2.1 through 403.3.2.3 as a function of system type and zone outdoor airflow rates.

403.3.2 System outdoor airflow. The outdoor air required to be supplied by each ventilation system shall be determined in accordance with Section 403.3.2.1 through 403.2.3 as a function of system type and zone outdoor airflow rates.

5. Add new text as follows:

403.3.2.1 Single zone systems. When one air handler supplies a mixture of outdoor air and recirculated return air to only one zone, the system outdoor air intake flow rate ( $V_{of}$ ) shall be determined in accordance with Equation 4-3.

$$V_{of} = V_{oz} \quad (\text{Equation 4-3})$$

403.3.2.2 100% outdoor air systems. When one air handler supplies only outdoor air to one or more zones, the system outdoor air intake flow rate ( $V_{of}$ ) shall be determined using Equation 4-4.

$$V_{of} = \sum_{\text{all zones}} V_{oz} \quad (\text{Equation 4-4})$$

403.3.2.3 Multiple zone recirculating systems. When one air handler supplies a mixture of outdoor air and recirculated return air to more than one zone, the system outdoor air intake flow rate ( $V_{of}$ ) shall be determined in accordance with Sections 403.3.2.3.1 through 403.3.2.3.5.

403.3.2.3.1 Primary outdoor air fraction. The primary outdoor air fraction ( $Z_p$ ) shall be determined for each zone in accordance with Equation 4-5.

$$Z_p = V_{oz}/V_{pz} \quad (\text{Equation 4-5})$$

Where:

$V_{pz}$  = primary airflow: The airflow rate supplied to the zone from the air-handling unit at which the outdoor air intake is located. It includes outdoor intake air and recirculated air from that air-handling unit but does not include air transferred or air recirculated to the zone by other means. For design purposes,  $V_{pz}$  shall be the zone design primary airflow rate, except for zones with variable air volume supply  $V_{pz}$  shall be the lowest expected primary airflow rate to the zone when it is fully occupied.

403.3.2.3.2 System ventilation efficiency. The system ventilation efficiency ( $E_v$ ) shall be determined using Table 403-2 or Appendix A of ASHRAE Standard 62.1.

**TABLE 403.2**  
**SYSTEM VENTILATION EFFICIENCY**

<u>Max(Zp)</u>	<u>Ev</u>
<u>≤ 0.15</u>	<u>1.0</u>
<u>≤ 0.25</u>	<u>0.9</u>
<u>≤ 0.35</u>	<u>0.8</u>
<u>≤ 0.45</u>	<u>0.7</u>
<u>≤ 0.55</u>	<u>0.6</u>
<u>≤ 0.65</u>	<u>0.5</u>
<u>≤ 0.75</u>	<u>0.4</u>
<u>&gt; 0.75</u>	<u>0.3</u>

**Notes for Table 8**  
 1. Max(Zp) is the largest value of Zp calculated using Equation 4-5 among all the zones served by the system.  
 2. Interpolating between table values shall be permitted.

**403.3.2.3.3 Uncorrected outdoor air intake.** The *uncorrected outdoor air intake* flow rate (*Vou*) shall be determined in accordance with Equation 4-7.

$$Vou = D \sum_{\text{all zones}} RpPz + \sum_{\text{all zones}} RaAz \quad (\text{Equation 4-7})$$

**Where:**

D = occupant diversity: the ratio of the system population to the sum of the zone populations, determined in accordance with Equation 4-8.

$$D = Ps / \sum_{\text{all zones}} Pz \quad (\text{Equation 4-8})$$

**Where:**

Ps = system population: The total number of occupants in the area served by the system. For design purposes, Ps shall be the maximum number of occupants expected to be concurrently in all zones served by the system.

**403.3.2.3.4 Outdoor air intake flow rate.** The outdoor air intake flow rate (Vof) shall be determined in accordance with Equation 4-9.

$$V_{of} = V_{ou}/E_v \quad (\text{Equation 4-9})$$

6. Revise table as follows:

**TABLE 403.3  
REQUIRED OUTDOOR VENTILATION AIR  
MINIMUM VENTILATION RATES**

OCCUPANCY CLASSIFICATION	ESTIMATED MAXIMUM OCCUPANT LOAD, PERSONS PER 1,000 SQUARE FEET a	OUTDOOR AIR (Cubic feet per Minute (cfm) Per person) UNLESS NOTED c	People Outdoor Airflow Rate in Breathing Zone Rp cfm/person	Area Outdoor Airflow Rate in Breathing Zone Ra cfm/ft <sup>2</sup>	Default Occupant Density #/1000 ft <sup>2</sup>	Exhaust Airflow Rate cfm/ft <sup>2</sup>
<b>Correctional facilities</b>						
Cells						
without plumbing fixtures	20	20	5	0.12	25	=
with plumbing fixtures <sup>200</sup>	20	20	5	0.12	25	1.00
Dining halls (See Food and Beverage Services)	400	45	=	=	=	=
Guard stations	40	45	5	0.06	15	=
Day room	=	=	5	0.06	30	=
Booking/waiting	=	=	7.5	0.06	50	=
Dry Cleaners, laundries						
Coin-operated dry cleaner	20		15	=	20	=
Coin-operated laundries	20	45	7.5	0.06	20	=
Commercial dry cleaner	30	30	30	=	30	=
Commercial laundry	40	25	25	=	10	=
Storage, pick up	30	35	7.5	.12	30	=
<b>Education</b>						
Auditoriums	450	45	5	0.06	150	=
Glassrooms	50	45	below	below	below	=
Corridors (See Public Spaces)	=	0.10 #/ft <sup>2</sup>	=	=	=	=
Laboratories	30	20	below	below	below	=
Libraries-Media center	20	45	10	0.12	25	=
Sports locker rooms <sup>200</sup>	=	0.50 #/ft <sup>2</sup>	=	=	=	0.50
Music rooms/Music/theater/dance	50	45	10	0.06	35	=
Smoking lounges <sup>200</sup>	70	60	60	=	70	=
Training shops	30	20	=	=	=	=
Daycare (through age 4)			10	0.18	25	=
Classrooms (ages 5-9)			10	0.12	25	=
Classrooms (age 9 plus)			10	0.12	35	=
Lecture classroom			7.5	0.06	65	=
Lecture hall (fixed seats)			7.5	0.06	150	=
Art classroom <sup>200</sup>			10	0.18	20	0.70
Science laboratories <sup>200</sup>			10	0.18	25	1.00
Wood/metal shops <sup>200</sup>			10	0.18	20	0.50
Computer lab			10	0.12	25	=
Multi-use assembly			7.5	0.06	100	=
Locker/dressing rooms <sup>200</sup>			=	=	=	0.25
<b>Food and beverage service</b>						
Bars, cocktail lounges	400	30	7.5	0.18	100	=
Cafeteria, fast food	400	20	7.5	0.18	100	=
Dining rooms	70	20	7.5	0.18	70	=
Kitchens (cooking) <sup>200</sup>	20	45	=	=	=	0.70
<b>Hospitals, nursing and convalescent homes</b>						
Autopsy rooms <sup>200</sup>	=	0.50 #/ft <sup>2</sup>	=	=	=	0.50
Medical procedure rooms	20	45	15	=	20	=
Operating rooms	20	30	30	=	20	=
Patient rooms	40	25	25	=	10	=
Physical therapy	20	45	15	=	20	=
Recovery and ICU	20	45	15	=	20	=
<b>Hotels, motels, resorts and dormitories</b>						
Assembly rooms Multi-purpose assembly	420	45	5	0.06	5	=
Bathrooms/Toilet - private <sup>200</sup>	=	35 #room 30 #room	=	=	=	25/50
Bedroom/living room	50	20	5	0.06	10	=
Conference/meeting rooms	20	45	5	0.06	50	=
Dormitory sleeping areas	420	30	7.5	0.18	20	=
Gambling casinos	=	30 #room	=	=	120	=
Living rooms	30	45	7.5	0.06	=	=
Lobbies/pre-function					30	=

OCCUPANCY CLASSIFICATION	ESTIMATED MAXIMUM OCCUPANT LOAD, PERSONS PER 4,000 SQUARE FEET <sup>a</sup>	OUTDOOR AIR (Cubic feet per Minute (cfm) Per person) UNLESS NOTED <sup>a</sup>	People Outdoor Airflow Rate in Breathing Zone Rp cfm/person	Area Outdoor Airflow Rate in Breathing Zone Ra cfm/ft <sup>2</sup> <sup>a</sup>	Default Occupant Density #/1000 ft <sup>2</sup> <sup>a</sup>	Exhaust Airflow Rate cfm/ft <sup>2</sup> <sup>a</sup>
Offices	60	20	5	0.06	50	=
Conference rooms	7	20	10/100	0.06	5	=
Office spaces	60	15	10/100	0.06	30	=
Reception areas	60	20	5	=	=	=
Telecommunication centers	60	20	5	0.06	60	=
and data entry	-	-	5	0.06	10	=
Telephone/data entry	-	-	5	0.06	10	=
Main entry lobbies	-	-	5	0.06	10	=
Private dwellings, single and Multiple	-	4.5 cfm/ft <sup>2</sup>	=	=	=	0.75
Garages, common for multiple units <sup>b</sup>	-	100 cfm per car	=	=	=	100 cfm per car
Garages, separate for each dwelling <sup>b</sup>	-	100 cfm intermittent or 25 cfm contin.	=	=	=	25/100 <sup>c</sup>
Kitchens <sup>a,c</sup>	-	100 cfm intermittent or 25 cfm contin.	=	=	=	=
Living areas <sup>c</sup>	Based upon number of bedrooms: first bedroom 2; each additional bedroom 4	0.35 air changes per hour or 45 cfm per person; whichever is greater	0.35 ACH but not less than 15 cfm/ft <sup>2</sup>	=	Based upon number of bedrooms: first bedroom 2; each additional bedroom 1	=
Toilet rooms and bathrooms <sup>a,c</sup>	-	mech. exhaust capacity of 50 cfm intermittent or 20 cfm contin.	=	=	=	20/50 <sup>c</sup>
Public spaces	-	0.05 #/ft <sup>2</sup>	=	0.06	=	=
Corridors and utilities	-	1.00 #/ft <sup>2</sup>	=	=	=	1.0
Elevator car <sup>a</sup>	-	0.5 #/ft <sup>2</sup>	=	=	=	=
Locker rooms <sup>a,c</sup>	-	50 cfm intermittent or 20 cfm contin.	=	=	=	50/20 <sup>c</sup>
Shower room (per shower head) <sup>a,c</sup>	-	60	=	=	=	=
Smoking lounges <sup>a,c</sup>	70	60	60	=	70	=
Toilet rooms - public <sup>a,c</sup>	-	75 fwt. or urinal	=	=	=	50/70 <sup>c</sup>
Places of religious worship	-	7.5	7.5	0.06	120	=
Courtrooms	-	7.5	7.5	0.06	70	=
Legislative chambers	-	7.5	7.5	0.06	50	=
Libraries	-	7.5	7.5	0.12	10	=
Museums (children's)	-	7.5	7.5	0.12	40	=
Museums/galleries	-	7.5	7.5	0.06	40	=
Retail stores, sales floors and Showroom floors	-	0.30 #/ft <sup>2</sup>	7.5	0.12	15	=
Basement and street Sales (except as below)	-	0.20 #/ft <sup>2</sup>	7.5	0.06	40	0.25
Dressing rooms	-	0.15 #/ft <sup>2</sup>	60	0.12	70	=
Malls and arcades Mall common areas	-	60	60	0.12	70	=
Shipping and receiving	70	0.15 #/ft <sup>2</sup>	=	0.12	=	=
Smoking lounges <sup>a,c</sup>	-	0.20 #/ft <sup>2</sup>	=	=	=	=
Storage rooms	-	0.05 #/ft <sup>2</sup>	=	=	=	=
Upper floors	-	0.05 #/ft <sup>2</sup>	=	=	=	=
Warehouses (See Storage)	-	0.05 #/ft <sup>2</sup>	=	=	=	=
Specialty shops	-	1.5 #/ft <sup>2</sup>	=	=	=	1.50
Automotive motor-fuel dispensing stations <sup>d</sup>	25	45	7.5	0.06	25	0.50

- f. Rates are per room unless otherwise indicated. The higher rate shall be provided where the exhaust system is designed to operate intermittently. The lower rate shall be permitted where the exhaust system is designed to operate continuously during normal hours of use.
- hg. Mechanical exhaust is required and recirculation is prohibited except that recirculation shall be permitted where the resulting supply airstream consists of not more than 10 percent air recirculated from these spaces (see Section 403.2.1, Items 2 and 4).
- i. For nail salons, the required exhaust shall include ventilation tables or other systems that shall capture the contaminants and odors at their source and are capable of exhausting a minimum of 50 cfm per station.

7. Add new text as follows:

403.4 Exhaust Ventilation. Exhaust airflow rate shall be provided in accordance with the requirements in Table 403.3. Exhaust makeup air shall be permitted to be any combination of outdoor air, recirculated air, and transfer air, except as limited in accordance with Section 403.2.

8. Revise as follows:

403.3.4 403.5 System operation. The minimum flow rate of outdoor air that the ventilation system must be capable of supplying during its operation shall be permitted to be based on the rate per person indicated in Table 403.3 and the actual number of occupants present.

403.3.3 403.6 Variable air volume system control. Variable air volume air distribution systems, other than those designed to supply only 100-percent outdoor air, shall be provided with controls to regulate the flow of outdoor air. Such control system shall be designed to maintain the flow rate of outdoor air at a rate of not less than that required by Section 403.3 over the entire range of supply air operating rates.

403.3.4 403.7 Balancing. The ventilation air distribution system shall be provided with means to adjust the system to achieve at least the minimum ventilation airflow rate as required by Sections 403.3 and 403.4. Ventilation systems shall be balanced by an approved method. Such balancing shall verify that the ventilation system is capable of supplying and exhausting the airflow rates required by Sections 403.3 and 403.4.

404.2 Minimum ventilation. Automatic operation of the system shall not reduce the ventilation airflow rate below 0.05 cfm per square foot (0.00025m<sup>3</sup>/s • m<sup>2</sup>) of the floor area and the system shall be capable of producing a ventilation airflow rate of 4-5 0.75 cfm per square foot (0.0076m<sup>3</sup>/s • m<sup>2</sup>) of floor area.

9. Add new text as follows:

## SECTION 202 GENERAL DEFINITIONS

BREATHING ZONE. The region within an occupied space between planes 3 and 72 in. (75 and 1800 mm) above the floor and more than 2 ft (600 mm) from the walls of the space or from fixed air-conditioning equipment.

NET OCCUPIABLE FLOOR AREA. The floor area of an occupiable space defined by the inside surfaces of its walls but excluding shafts, column enclosures, and other permanently enclosed, inaccessible, and unoccupiable areas. Obstructions in the space such as furnishings, display or storage racks, and other obstructions, whether temporary or permanent, are not deducted from the space area.

OCCUPIABLE SPACE. An enclosed space intended for human activities, excluding those spaces intended primarily for other purposes, such as storage rooms and equipment rooms, that are only intended to be occupied occasionally and for short periods of time.

ZONE. One occupiable space or several occupiable spaces with similar occupancy classification (see Table 403.3), occupant density, zone air distribution effectiveness, and zone primary airflow rate per unit area.

**Reason:** To bring the IMC more in line with contemporary ventilation and air quality criteria that are based on research conducted since the ventilation provisions of the IMC were revised and the consensus achieved under the ANSI Standards process.

The current ventilation criteria in the IMC are essentially based on ASHRAE Standard 62-1989. Research has been conducted since then our knowledge of indoor air quality and ventilation has evolved. In response to these actions ASHRAE has enhanced Standard 62, upon which the IMC is based. This code change would make the IMC consistent with ventilation rate procedures defined in ANSI/ASHRAE Standard 62.1-2004 and consistent with the 2006 Uniform Mechanical Code.

ANSI/ASHRAE Standard 62.1-2004 is a consensus national standard. Standard 62.1 ventilation rate calculation procedure has been substantially updated in the 2004 version to reflect the latest research on building indoor air quality. The procedure now requires designers to account for pollutant sources other than occupants, such as building materials and furnishings, and to account for the efficiency of the ventilation system to deliver outdoor air to the breathing zone. Ventilation systems designed using the new procedures will result in slightly lower outdoor rates for most occupancies compared to the current code, reducing first costs and energy costs.



**Bibliography:**

*ANSI/ASHRAE Standard 62.1-2004 Ventilation for Acceptable Indoor Air Quality*, American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc., Atlanta, GA

**Cost Impact:** The code change proposal will not increase the cost of construction, and in some instances will reduce the first cost of construction. Engineering design effort and jurisdictional plan review processes will not be materially affected due to the availability and greater specificity of compliance tools.

**Supporting Statement:** Currently industry has indicated outdoor air rates are too excessive, mainly in two occupancies, A and E. This proposal incorporates all the necessary criteria from the newly developed ASHRAE 62 Standard, 2004 Edition for updated outdoor air rates. The net effect is that the new Standard has reduced outdoor airflow rates almost 50% for these two occupancies. This proposal contains a new method to assure that the air is actually delivered to the spaces as intended. This is the format currently utilized by the IMC. All the pertinent material has been extracted from the ASHRAE Standard in relation to outdoor air. This proposal was approved as submitted during the Public Comment Hearings in FL.

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<p>Submitted by: Guy Tomberlin, Fairfax County      Representing: VA Building and Code Officials Association (VBCOA) and VA Plumbing and Mechanical Inspectors Association (VPMIA)</p> <p>Address: 12055 Government Center Pkwy., Suite 630 Fairfax, VA 22030    Phone No.: 703-324-1611</p> <p>Regulation Title: _____ Section No(s): _____</p>		

Proposed Change:

Proposal:

Delete these definitions and terms with out substitution:

**CONFINED SPACES.** A space having a volume less than 50 cubic feet per 1,000 British thermal units per hour (Btu/h) (4.8 m<sup>3</sup>/kW) of the aggregate input rating of all appliances installed in that space.

**UNCONFINED SPACE.** A space having a volume not less than 50 cubic feet per 1,000 Btu/h (4.8 m<sup>3</sup>/kW) of the aggregate input rating of all appliances installed in that space. Rooms communicating directly with the space in which the appliances are installed, through openings not furnished with doors, are considered a part of the unconfined space.

**UNUSUALLY TIGHT CONSTRUCTION.** Construction meeting the following requirements:

1. Walls exposed to the outdoor atmosphere having a continuous water vapor retarder with a rating of 1 perm [57 ng/(s · m · Pa)] or less with openings gasketed or sealed;
2. Openable windows and doors meeting the air leakage requirements of the *International Energy Conservation Code*, Section 402.4.2; and
3. Caulking or sealants are applied to areas, such as joints around window and door frames, between sole plates and floors, between wall-ceiling joints, between wall panels, at penetrations for plumbing, electrical and gas lines and at other openings.

SECTION 701

GENERAL

**701.1 Scope.** ~~The provisions of this chapter shall govern the requirements for combustion and dilution air for fuel-burning appliances other than gas-fired appliances. The requirements for combustion and dilution air for gas-fired appliances shall be in accordance with the *International Fuel Gas Code*.~~ Liquid- and solid-fuel-burning appliances shall be provided with a supply of air for fuel combustion, draft hood dilution and ventilation of the space in which the appliance is installed, in accordance with the appliance manufactures installation instructions and NFPA 31. The methods of providing combustion air in this chapter do not apply to fireplaces, fireplace stoves and direct-vent appliances. This chapter shall not apply to natural gas or liquefied petroleum applications, the requirements for combustion and dilution air for gas-fired appliances shall be in accordance with the *International Fuel Gas Code*.

**DELETE THE REMAINING TEXT OF THE ENTIRE CHAPTER 7**

**Supporting Statement:**

This proposal was approved as submitted at the Public Hearings in FL.

These definitions have been deleted from the IFGC. They were used to determine if a structure needed the addition of outdoor air for combustion air.

Testing from the fuel gas industry has determined that "unusually tight", "unconfined space", and "confined space", are not factors of any relevance when determining if combustion air needs to be obtained from outdoors.

The provisions found in Chapter 7 are based on fuel gas provisions which are not germane to liquid or solid fuel appliances. NFPA 31 is a maintained document that contains the relevant information for liquid and solid fuel appliances. NFPA 31 is already a reference document in the IRC so there is not an increased cost to construction. As always the manufactures installation instructions are part of code requirements.

**Proposed change to the 2003 International Fuel Gas Code (IFGC) Section 503.3.4  
Ventilating hoods and exhaust systems**

Submitted by;  
J.D. Mitchell, Fire Protection Field Supervisor  
Loudoun County Department of Building and Development

Proposed change;  
Section 503.3.4 of the IFGC needs to be changed to read, " Where any cooking appliance or cooking equipment, either manually or automatically operated, in addition to any other automatically operated equipment is vented through a ventilating hood or exhaust system equipped with a damper or power means of exhaust, provisions shall be made to allow the flow of gas to the appliance or equipment ~~main burners~~ only when the damper is open to a position to properly vent the equipment and when the power means of exhaust is in operation."

Rational;  
Section 503.3.4 of the IFGC deals with when exhaust systems must be in operation. Although not specifically worded as such, this section will pertain to commercial cooking appliances found under kitchen hood exhaust systems. These appliances require the ventilation of grease laden vapors and products of combustion

The current wording of Section 503.3.4 states, "...Where automatically operated equipment is vented through a ventilating hood or exhaust system equipped with a damper or power means of exhaust, provisions shall be made to allow the flow of gas to the main burners only when the damper is open to a position to properly vent the equipment and when the power means of exhaust is in operation."

This Section currently covers "automatic" appliances such as deep fryers, some griddles and ovens, all typically thermostatically controlled appliances. It will not cover ranges, char broilers, some griddles or wok tables, all typically manually controlled. These "manually" controlled appliances still generate grease laden vapors and products of combustion. The proposed change will clarify that all cooking equipment requires ventilation during operation.

Add a new Section to read;  
**503.3.4.1 Bypass lines and jumpers.** Bypass lines and jumpers shall not be installed around any valve or electric solenoid allowing any gas to the appliances or equipment.

Rational;  
These bypass lines are being installed on most every kitchen hood system in order to allow gas to keep pilots lit. A kitchen cooking appliance manufacturer was contacted and ask how these bypass lines would affect the operation of their appliance. These lines are not listed, tested nor approved for use with any appliance. Further, use of these lines will void the listing of the appliance. In order to receive a listing from Underwriters Laboratory or Factory Mutual, the appliances are tested with an X size gas line under X

gas pressure. If the appliance calls for a one inch gas line and 3 psi gas pressure, a ¼ inch copper bypass line is clearly not a one inch line and can adversely change the required gas pressure. Use of these lines may also contribute to incomplete combustion thus causing a carbon monoxide build up. A 10 burner range requiring a one inch gas line, but utilizing a ¼ inch copper bypass line, can have 6 to 8 burners operating however, it would be questionable if these burners are functioning correctly. As in this situation where the ventilating hood would be off and gas is being supplied via the bypass line, any products of combustion be it complete or incomplete would not be properly ventilated from the building.

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<p>Submitted by: Guy Tomberlin, Fairfax County</p> <p>Representing: VA Plumbing and Mechanical Inspectors Association (VPMIA)</p> <p>Address: 12055 Government Center Pkwy., Suite 630 Fairfax, VA 22030 Phone No.: 703-324-1611</p> <p>Regulation Title: USBC Part I New Construction - IFGC Technical Amendments Submitted by J D Mitchell.</p> <p>Section No(s): Section 503.3.4</p>		

**Supporting statement of explanation:**

**SECTION 505 (IFGC)  
DIRECT-VENT, INTEGRAL VENT,  
MECHANICAL VENT AND  
VENTILATION/EXHAUST HOOD VENTING**

**505.1 General.** The installation of direct-vent and integral vent appliances shall be in accordance with Section 503. Mechanical venting systems and exhaust hood venting systems shall be designed and installed in accordance with Section 503.

**505.1.1 Commercial cooking appliances vented by exhaust hoods.** Where commercial cooking appliances are vented by means of the Type I or II kitchen exhaust hood system that serves such appliances, the exhaust system shall be fan powered and the appliances shall be interlocked with the exhaust hood system to prevent appliance operation when the exhaust hood system is not operating. Where a solenoid valve is installed in the gas piping as part of an interlock system, gas piping shall not be installed to bypass such valve. Dampers shall not be installed in the exhaust system.

**Exception:** An interlock between the cooking appliance(s) and the exhaust hood system shall not be required where heat sensors or other approved methods automatically activate the exhaust hood system when cooking operations occur.

This is the new text included in the 2006 International Fuel Gas Code (IFGC). It appears to adequately address the proponents concerns. The proponent's proposal and the new IFGC text actually achieve the same net effect. They both require all appliances to be interlocked and they both prohibit by-pass piping around solenoids. However, by using the newly worded text of Section 505.1.1 (which includes reference to Section 503) of 2006 IFGC eliminates the need for the proposed technical amendment to the USBC IFGC requirements.



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<p>Submitted by: Chuck Bajnai Representing: chesterfield County Address: 9800 government Parkway, Chesterfield, VA 23832 Phone No.: (804) 717-6428 Regulation Title: IRC Appendix G, Swimming Pools, Spas and Hot Tubs, Section No(s): AG105.6 (new)</p>		
<p>Proposed Change:</p> <p>Add new section:</p> <p><u>Section AG105.6 Natural barrier exceptions. The requirement for a barrier surrounding a swimming pool, spa or hot tub is waived along those areas where natural land features provide equivalent protection. The man-made barrier described in AG105.2 shall extend to the within 4" of the natural barrier, or at least 24 inches past dry land in the case of a water feature. Land features may include such natural features as: the frontage along waterfront property and cliff edges or rock formations greater than 48" tall.</u></p>		

**Supporting Statement:**

Natural features can protect as well as fence type barriers from" potential drowning and near-drowning by restricting access..."

This still requires a continuous barrier around the pool, spa or hot tub, but it allows the barrier to be something other than a man-made barrier described in Ag105.2.

Providing a man-made barrier in front of a natural barrier would constitute a "double barrier".

Since the code is tacit about this particular situation, this code change proposes to address the issue.

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Document No. \_\_\_\_\_

Committee Action: \_\_\_\_\_

BHCD Action: \_\_\_\_\_

Submitted by: Michael K. Lawson, CGA, CET, CCI

Address: 1139 North Boston Rd, Troy, VA 22974

Phone No.: 434 589 6437

Regulation Title: State Uniform Building Code

Section No(s): Appendix G, Swimming Pools, etc

Proposed Changes: (1) Add to Section AG107 Standards a reference to ASTM -F2208-2e (Swimming Pool Alarms).

(2) Incorporate the use of pool alarms as a permitted methodology for residential swimming pool safety as an alternative in AG105.2 subparagraph 9.

(3) Add language to section AG105.5: "Localities are permitted to relax the code provisions of AG 105 when subject pool is not a visible 'attractive nuisance' from adjacent properties or in other circumstances when the literal application of the code would be excessively restrictive on subject property."

**Supporting Statement:**

(1, 2) The Code as currently constituted does not yet embrace existing pool alarm technology. There are now a number of alarm systems, which include laser, wave detection, sonar, negative displacement technology or other types of sensors on the market. All of these systems employ a local alarm (at the pool); most also have a "remote station" alarm that sounds in the home or other designated location, and many can be linked to private home security services, such as ADT, Brinks or other private associations. The American Society for Testing and Materials (ASTM) has published a standard in 2002 (F2208-02) regarding the performance of these systems.

(3) The Code needs to provide flexibility to local officials to exercise some "common sense" when dealing with non-typical residential properties. Dwellings located on larger acreage parcels, isolated dwellings, dwellings with existing perimeter fencing, dwellings with natural barriers (hedges or plantings) and others where the pool or spa is not readily accessible and/or visible to outsiders might not need close-in pool barriers. Such properties might satisfy public safety concerns with only automatic pool covers or pool alarms at the discretion of the local enforcement official

The author is a Certified Engineering Technician (CET), level III, Civil Engineering; level III, Architectural/Building Construction and level II, Electrical/Electronics, certification # 81776, National Institute for Certification in Engineering Technologies (NICET); a Certified Construction Inspector (CCI) by the Association of Construction Inspectors and a Certified General Appraiser in the Commonwealth of Virginia.

**NON-CONSENSUS CODE CHANGES**

**VIRGINIA MAINTENANCE CODE**

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<b>Submitted by:</b> ___Ralston McInnis___ <b>Representing:</b> ___VBCOA Property Maintenance Committee___ <b>Address:</b> ___400 Granby, Norfolk, VA 23510___ <b>Phone No.:</b> (757) 664 6563___ <b>Regulation Title:</b> ___Virginia Maintenance Code; Enforcement Generally___ <b>Section No(s):</b> Section 104___		
<b>Proposed Change:</b> ADD <b>Note:</b> <u>Section 104.5.4.3</u> Work done to correct violations of this code is <del>generally</del> subject to the permit, inspection and approval provisions of the Virginia Construction Code.		
<b>Supporting Statement:</b> The International Property Maintenance Code requires existing structures and premises that are not in compliance with the code to be altered or repaired to meet the code. The note found as an addendum to Section 104.5.4.2 does not rise to the level of an enforceable standard. This change will allow the inspector/technical assistant to apply/enforce the minimum repair provisions of the Virginia Construction Code.		

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Submitted by: <u>Ralston McInnis</u> VBCOA	Representing: <u>Property VBCOA Maintenance Committee</u>
Address: <u>400 Granby - Norfolk, VA 23510</u>	Phone No.: <u>(757) 664-6563</u>
Regulation Title: <u>Minimum Bedroom Areas;</u> Section No(s): <u>Section 1208.1.1(IBC)</u>	

**Proposed Change:**  
1208.1.1 Bedroom Requirements. Every bedroom occupied by more than one person shall contain at least 50 square feet (4.6 m2) of floor area for each occupant thereof.

1208.5 Overcrowding.  
Dwelling units shall not be occupied by more occupants than permitted by the minimum area requirements of Table 1208.5.

**TABLE 404.5**  
MINIMUM AREA REQUIREMENTS

SPACE	MINIMUM AREA IN SQUARE FEET		
	1-2 OCCUPANTS	3-5 OCCUPANTS	6 OR MORE OCCUPANTS
Living room a,b	120	120	150
Dining room a,b	No requirement	80	100
Bedrooms	Shall comply with section 404.4.1		

For SI: 1 square foot = 0.093 m<sup>2</sup>.

a. See Section 404.5.2 for combined living room/dining room spaces.

b. See Section 404.5.1 for limitations on determining the minimum occupancy area for sleeping purposes.

**1208.1 Sleeping area.**

The minimum occupancy area required by Table 1208.5 shall not be included as a sleeping area in determining the minimum occupancy area for sleeping purposes. All sleeping areas shall comply with Section 1208.1.

**1208.2 Combined spaces.**

Combined living room and dining room spaces shall comply with the requirements of Table 1208.5 if the total area is equal to that required for separate rooms and if the space is located so as to function as a combination living room/dining room.

**Supporting Statement:**

Language in the 2003 IRC Commentary suggests that "interior living conditions including odor, moisture and disease transmission" play a major role in interior living conditions. The Commentary further states that the "IRC regulates room sizes to assist in maintaining a safe and comfortable interior environment". The Commentary also states that not only is room size regulated but the number of occupants, ceiling height and ventilation all have an impact on the floor area of habitable spaces. This suggests that the intent of the IRC is to in some fashion regulate not only light and ventilation but occupant load also. The language contained in the 2006 version of the IPMC is both ambiguous and subjective rendering difficult to apply and impossible to enforce. The 2006 Edition fails to recognize the intent of the IRC to regulate occupant loads in residential structures. Therefore, this proposal is to retain the language contained in the subject sections the 2003 Edition of the IPMC in the administrative chapter of the Virginia Maintenance Code.



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<p>Submitted by: <u>Ralston W. McInnis</u> Representing: <u>VBCOA Property Maintenance Committee</u></p> <p>Address: <u>400 Granby Street - Norfolk, VA 23510</u> Phone No.: <u>(757) 664-6563</u></p> <p>Regulation Title: <u>Overcrowding</u> Section No(s): <u>404.5 (IPMC)</u></p>		

Proposed Change:

**404.4.1 Room area.** Every living room shall contain at least 120 square feet (11.2m<sup>2</sup>) and every bedroom shall contain at least 70 square feet (6.5m<sup>2</sup>)- and every bedroom occupied by more than one person shall contain at least 50 square feet (4.6m<sup>2</sup>) of floor area for each occupant thereof.

**404.5 Overcrowding.** The number of persons occupying a dwelling unit shall not create conditions, that in the opinion of the code official, endangers the life, health, safety or welfare of the occupants.

**404.5 Overcrowding.** Dwelling units shall not be occupied by more occupants than permitted by the minimum area requirements of Table 404.5.

**TABLE 404.5**  
**MINIMUM AREA REQUIREMENTS**

SPACE	MINIMUM AREA IN SQUARE FEET		
	1-2 OCCUPANTS	3-5 OCCUPANTS	6 OR MORE OCCUPANTS
Living room a,b	120	120	150
Dining room a,b	No requirement	80	100
Bedrooms	Shall comply with section 404.4.1		

For SI: 1square foot=0.093 m<sup>2</sup>.

- a. See Section 404.5.2 for combined living room/dinning room spaces.
- b. See Section 404.5.1 for limitations on determining the minimum occupancy area for sleeping purposes.

**404.5.1 Sleeping area.** The minimum occupancy area required by Table 404.5 shall not be included as a sleeping area in determining the minimum occupancy area for sleeping purposes. All sleeping areas shall comply with Section 404.4.

**404.5.2 Combined spaces.** Combined living room and dining room spaces shall comply with the requirements of Table 404.5 if the total area is equal to that required for separate rooms and if the space is located so as to function as a combination living room/dining room.

**Supporting Statement:**

Language in the 2003 IRC Commentary suggests that "interior living conditions including odor, moisture and disease transmission" play a major role in interior living conditions. The Commentary further states that the "IRC regulates room sizes to assist in maintaining a safe and comfortable interior environment". The Commentary also states that not only is room size regulated but the number of occupants, ceiling height and ventilation all have an impact on the floor area of habitable spaces. This suggests that the intent of the IRC is to in some fashion regulate not only light and ventilation but occupant load also. The language contained in the 2006 version of the IPMC is both ambiguous and subjective rendering difficult to apply and impossible to enforce. The 2006 Edition fails to recognize the intent of the IRC to regulate occupant loads in residential structures. Therefore, this proposal is to retain the language contained in the subject sections the 2003 Edition of the IPMC in the administrative chapter of the Virginia Maintenance Code.

## DEPT. OF HOUSING AND COMMUNITY DEVELOPMENT REGULATORY CHANGE FORM

(Use this form to submit changes to building and fire codes)

Address to submit to:

DHCD, the Jackson Center  
501 North Second Street  
Richmond, VA 23219-1321

Tel. No. (804) 371 - 7150  
Fax No. (804) 371 - 7092  
Email: bhcd@dhcd.state.va.us

Document No. \_\_\_\_\_

Committee Action: \_\_\_\_\_

BHCD Action: \_\_\_\_\_

Submitted by: Ralston McInnis

Representing: VBCOA Property Maintenance Committee

Address: 400 Granby - Norfolk, VA23510

Phone No.: (757) 664-6563

Regulation Title: Minimum Room Areas:

Section No(s): Section R304.2.1 (IRC)

Proposed Change:

R304.2.1 Bedroom Requirements. Every bedroom occupied by more than one person shall contain at least 50 square feet (4.6 m2) of floor area for each occupant thereof.

R304.2.2 Overcrowding.

Dwelling units shall not be occupied by more occupants than permitted by the minimum area requirements of Table R304.2.2.

**TABLE 404.5**  
**MINIMUM AREA REQUIREMENTS**

SPACE	MINIMUM AREA IN SQUARE FEET		
	1-2 OCCUPANTS	3-5 OCCUPANTS	6 OR MORE OCCUPANTS
Living room a,b	120	120	150
Dining room a,b	No requirement	80	100
Bedrooms	Shall comply with section 404.4.1		

For SI: 1 square foot = 0.093 m2.

a. See Section 404.5.2 for combined living room/dining room spaces.

b. See Section 404.5.1 for limitations on determining the minimum occupancy area for sleeping purposes.

R304.2.2.1 Sleeping area.

The minimum occupancy area required by Table R304.2.2 shall not be included as a sleeping area in determining the minimum occupancy area for sleeping purposes. All sleeping areas shall comply with Section R304.2.

R304.2.2.2 Combined spaces.

Combined living room and dining room spaces shall comply with the requirements of Table R304.2.2 if the total area is equal to that required for separate rooms and if the space is located so as to function as a combination living room/dining room.

**Supporting Statement:**

Language in the 2003 IRC Commentary suggests that "interior living conditions including odor, moisture and disease transmission" play a major role in interior living conditions. The Commentary further states that the "IRC regulates room sizes to assist in maintaining a safe and comfortable interior environment". The Commentary also states that not only is room size regulated but the number of occupants, ceiling height and ventilation all have an impact on the floor area of habitable spaces. This suggests that the intent of the IRC is to in some fashion regulate not only light and ventilation but occupant load also. The language contained in the 2006 version of the IPMC is both ambiguous and subjective rendering difficult to apply and impossible to enforce. The 2006 Edition fails to recognize the intent of the IRC to regulate occupant loads in residential structures. Therefore, this proposal is to retain the language contained in the subject sections the 2003 Edition of the IPMC in the administrative chapter of the Virginia Maintenance Code.

# **NON-CONSENSUS CODE CHANGES**

## **VIRGINIA STATEWIDE FIRE PREVENTION CODE**

**DEPT. OF HOUSING AND COMMUNITY DEVELOPMENT REGULATORY CHANGE FORM**

(Use this form to submit changes to building and fire codes)

<b>Address to submit to:</b>  DHCD, the Jackson Center 501 North Second Street Richmond, VA 23219-1321  Tel. No. (804) 371 – 7150 Fax No. (804) 371 – 7092 Email: bhcd@dhcd.state.va.us	<b>Document No.</b> _____  <b>Committee Action:</b> _____  <b>BHCD Action:</b> _____
<b>Submitted by:</b> Dennis Mitchell _____ <b>Representing:</b> __ Fire Services Board _____  <b>Address:</b> __ 512 Redbud Lane_ Bluemont VA 20135 _____ <b>Phone No.:</b> __ 703-777-0219 _____  <b>Regulation Title:</b> __ Statewide Fire Prevention Code Part II _____ <b>Section No(s):</b> Wildland-Urban Interface Code _____	
<p><b>Proposed Change:</b> Create: SFPC Part II Wild-land- Urban Interface Code Delete chapter one and replace with chapter one of the SFPC.</p> <p><b>Change 103.1 General</b> The following document is adopted and incorporated by reference to be an enforceable part of SFPC .International Wild-land-Urban Interface Code</p> <p>Delete Ignition Resistant Construction from the definitions</p> <p><b>Change section 302.1 Declaration.</b> The legislative body shall declare the wild-land interface areas within the jurisdiction. The wild-land interface areas shall be based on the findings of fact [see appendix E]. The wild-land interface area boundary shall correspond to natural or man made features and include a minimum of 640-50 acres <del>unless a smaller area is approved by the legislative body through assessment of fuel types and physical characteristics affecting wild land fire behavior.</del> The remainder unchanged.</p> <p>Delete section 402.1.2 and 402.2.2 Water Supply</p> <p>Delete all of section 403 Access</p> <p>Delete all of section 404 Water Supply</p> <p>Delete all of chapter 5 Special Building Construction</p> <p>Delete section 602 Automatic Sprinkler Systems</p> <p>Appendix A,E, and F are for information purposes only.</p>	
<p><b>Supporting Statement:</b> There has been more structural fire loss from wild land fires east of the Mississippi river than west. The provisions in the IWUIC are meant to reduce the risk of damage to structures due to fire. The construction provisions have been purposely left out of this document since they would have to be incorporated into the USBC. The VA Department of Forestry already uses part of this code to evaluate interface areas. The provisions of this code are already authorized for adoption by a locality to incorporate into the Fire Prevention Code. By adopting this code we will be making it a <b>uniform code</b> for adoption.</p>	

**DEPT. OF HOUSING AND COMMUNITY DEVELOPMENT REGULATORY CHANGE FORM**  
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<p>Address to submit to:</p> <p>DHCD, the Jackson Center 501 North Second Street Richmond, VA 23219-1321</p> <p>Tel. No. (804) 371 - 7150 Fax No. (804) 371 - 7092 Email: bhcd@dhcd.state.va.us</p>		<p>Document No. _____</p> <p>Committee Action: _____</p> <p>BHCD Action: _____</p>
<p>Submitted by: _William J. Hall_____ Representing: VA Building and Code Officials Association</p> <p>Address: _P.O. Box 12164 Richmond VA 23241 Phone No.: _804-649-8471_____</p> <p>Regulation Title: VA State Fire Prevention Code Section No(s): 805.1_____</p>		



Proposed Change:

## SECTION 805 DECORATIONS AND TRIM

### 805.1 General.

In occupancies of Groups A, E, I and R-1 and dormitories in Group R-2, curtains, draperies, hangings and other decorative materials suspended from walls or ceilings shall meet the flame propagation performance criteria of NFPA 701 in accordance with Section 806.2 or be noncombustible.

#### Exceptions:

1. In dwelling units and sleeping units located in dormitories of Group R-2, the permissible amount of decorative paper material, suspended from or attached to the walls shall not exceed 50 percent of the aggregate area of the walls, where the building is equipped throughout with an automatic sprinkler system in accordance with section 903.3.1.1 or 903.3.1.2.
2. In dwelling units and sleeping units located in dormitories of Group R-2, the permissible amount of decorative paper material, suspended from or attached to the walls shall not exceed 20 percent of the aggregate area of the walls, where the unit is provided with single station or multiple smoke alarms in accordance with 907.2.10.1.2.
3. In corridors located in dormitories of Group R-2, the permissible amount of decorative paper material, suspended from or attached to the walls shall not exceed 10 percent of the aggregate area of the walls.

In Groups I-1 and I-2, combustible decorations shall be flame retardant unless the decorations, such as photographs and paintings, are of such limited quantities that a hazard of fire development or spread is not present. In Group I-3, combustible decorations are prohibited.

**Supporting Statement:**

As written, the International Fire Code does not allow combustible decorations within college dormitories. This section is not only impractical but also un-enforceable. We feel that this change offers a good compromise between real life conditions and fire protection in these dormitory occupancies. Recognizing that sprinkler protection is a proven performer in stopping the spread of fire, this proposal allows for what is commonly encountered in most dorm rooms, which is approximately 50% percent of wall space covered with decorative paper material. 20% is proposed in non-sprinkled dorm rooms equipped with smoke detectors.

10% of decorations is proposed for corridors. We feel that although this is a common practice, combustible material should be limited in these areas.

Commonly, inspectors encounter fabrics and textiles hanging from ceiling and walls. This proposal would still prohibit any fabric or textile decorations as well as any combustible material being hung from the ceiling.

**DEPT. OF HOUSING AND COMMUNITY DEVELOPMENT REGULATORY CHANGE FORM**  
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Address to submit to:  DHCD, the Jackson Center 501 North Second Street Richmond, VA 23219-1321  Tel. No. (804) 371 - 7150 Fax No. (804) 371 - 7092 Email: bhcd@dhcd.state.va.us	Document No. _____  Committee Action: _____  BHCD Action: _____
Submitted by: <u>William R. Smith</u> Representing: <u>Virginia State Fire Chiefs</u>  Address: <u>2408 Courthouse Drive, Virginia Beach, VA 23456-9065</u> Phone No.: <u>757-427-8584</u>  Regulation Title: <u>Statewide Fire Prevention Code Section No(s): 904.11</u>	
Proposed Change: 904.11 Commercial cooking systems. The automatic fire-extinguishing system for commercial cooking systems shall be of a type recognized for protection commercial cooking equipment and exhaust systems of the type and arrangement protected. Preengineered automatic dry- and wet-chemical extinguishing systems shall be tested in accordance with UL 300 and listed and labeled for the intended application. <u>Existing automatic fire extinguishing systems for commercial cooking systems shall be UL300 compliant by January 1, 2008.</u> Other types of automatic fire-extinguishing systems shall be listed and labeled for specific use as protection for commercial cooking operations. The system shall be installed in accordance with this code, its listing and the manufacturer's installation instructions. Automatic fire-extinguishing systems of the following types shall be installed in accordance with the referenced standard indicated, as follows:  <i>The date should be either 12 or 24 months past the adoption date of the 2006 code.</i>	
Supporting Statement: UL 300 systems were required on Nov. 21, 1994 for all new installations. The State has allowed the non-conforming systems to remain in service as long as the system can be serviced and maintained. The larger service companies no longer service or maintain the non-conforming systems because of liability and statements by the manufacturers that those systems are no longer adequate. The systems installed prior to UL 300 were designed for the use of animal fat grease used in the deep-frying processes, the new vegetable based oils burn at a higher btu and the non UL 300 extinguishing systems are unable to extinguish a fire.	

**DEPT. OF HOUSING AND COMMUNITY DEVELOPMENT REGULATORY CHANGE FORM**

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<p>Submitted by: Guy Tomberlin, Fairfax County</p> <p>Representing: VA Plumbing and Mechanical Inspectors Association (VPMIA)</p> <p>Address: 12055 Government Center Pkwy., Suite 630 Fairfax, VA 22030 Phone No.: 703-324-1611</p> <p>Regulation Title: Statewide Fire Prevention Code</p> <p>Section No(s): 904.11</p>		

**Supporting statement of opposition:**

This proposal submitted by the VA State Fire Chiefs recommends all hood fire suppression systems be upgraded to UL 300 by January 2008. The next USBC adoption is not scheduled until March or April of 08. The proposal (even the suggested 12 to 24 month effective date) that the proponent request for hood suppression system update is not necessary and will present many existing restaurant owners across the Commonwealth with an unjustified financial hardship. It is not reasonable to enact regulations that will create so many violations of existing systems that do not happen to be UL300. The many existing systems that are not UL 300 would in effect be in violation of the USBC the moment of the effective adoption date. This proposal has the net effect of retroactive provisions. This is completely contrary to the philosophy that the USBC has always endorsed. The fundamental concept of the USBC has recognized existing systems and allowed them to remain in operation as long as the systems are maintained in operating condition, at least as safe as when they were constructed and approved, if the original installation was installed (legally) in accordance with the building code regulations in effect at the time.

The objective of this proposal as identified in the proponents supporting statement appears to be based on the service industry's inability to maintain these older systems and an attempt to avoid perceived issues with the service community's liability. The current concept endorsed by the USBC is to allow systems to remain in operation and when failures occur or repairs are necessary the USBC further permits replacement with similar or like equipment. This has been the approved preferred method of upgrading systems (if parts are no longer available) referenced in the USBC and has a proven successful track record. If repair parts are not available then upgrades/replacements are inevitable. The SFPC requires routine evaluation/inspection/testing of hood suppression systems. Upon the discovery that one of these older systems will not operate as intended, repairs are required, no different than an HVAC appliance. However many of these older systems DO pass the required test and will operate as originally intended and installed. It is unreasonable to require a mandatory upgrade when many systems are being utilized across VA that are in acceptable and safe condition and able to perform the intended function. The submitted proposal included no supporting justification (fire reports) that would reflect where any of these older systems are not performing correctly when needed under fire condition. That is the real issue associated with suppression systems, do they and/or will they perform the intended function under activation in the event of a fire condition? We respectfully request the opportunity to review and evaluate any data that the proponent can produce to substantiate this overly restrictive and cost prohibitive proposed regulation that reflects systems are not working properly under fire condition and property is being lost or compromised.

The idea that a contractor could somehow be liable for an existing systems operation is simply not logical. The service contractor inspects, evaluates, and tests the suppression system. If the system fails to meet any requirements for safe operation the contractor documents the deficiencies and as always the owner is the liable party and the sole entity responsible for any and all corrective measures. The owner is the responsible party from the time he/she takes occupancy to the time they move out and at all time in between. A contractor who responds to an owners request to perform service that is required by the SFPC does not become a liable entity because he/she happens to witness an existing system that is not functioning correctly. This is no different than an inspector who is performing a routine inspection and happens to visit a place of business and discovers a violation. He/she evaluates the situation, determines the severity of such situation and then documents the findings and leaves a notice with the owner. The inspector in no way becomes liable for the situation he/she discovered.

There is somewhere in the neighborhood of 3,200 restaurants in Fairfax County alone. It is not stated in this proposal exactly or even approximately how many of these older systems (non-UL 300) exist across the Commonwealth but one can only imagine, several! Why penalize the many restaurant owners of older hood fire suppression systems that are in excellent working condition? The financial ramification of this proposal may be divesting for many VA citizens simply because they happen to have had ownership of property before 1994, this seems completely unfair since no documentation has been produced to reflect any justification for this overly restrictive measure.

Another problem with this potential retroactive provision is that there are many other "bells and whistles" associated with an upgrade. Things like appliance interlock and shut down. These items may not have been required for the initial installation many years ago. Installation of appliance shut down on an existing system has the potential to cost upwards of \$1,000.00+++ in many cases. This does not even begin to include the cost of the piping system and bottle stations. Again, existing systems must be tested and evaluated periodically. It is not reasonable to require so many legitimate working systems to be replaced with no documented substantiation. Unfortunately the cost of these upgrades can be astronomical. We are urging the BHCD to not approve this proposal.

# **NON-CONSENSUS CODE CHANGES**

## **VIRGINIA AMUSEMENT DEVICE REGULATIONS**

**DEPT. OF HOUSING AND COMMUNITY DEVELOPMENT REGULATORY CHANGE FORM**

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<p>Address to submit to:</p> <p>DHCD, the Jackson Center 501 North Second Street Richmond, VA 23219-1321</p> <p>Tel. No. (804) 371 - 7150 Fax No. (804) 371 - 7092 Email: bhcd@dhcd.state.va.us</p>		<p>Document No. _____</p> <p>Committee Action: _____</p> <p>BHCD Action: _____</p>
<p>Submitted by: <u>Amusement Device Technical Advisory Committee</u> Representing: _____</p> <p>Address: _____ Phone No.: _____</p> <p>Regulation Title: <u>Virginia Amusement Device Regulations</u> Section No(s): <u>13 VAC 5-31-90</u></p>		
<p>Proposed Change:</p> <p>Change Section 90 to read as follows:</p> <p>13 VAC 5-31-90. Accidents.</p> <p>In the event of an accident involving serious injury or death <u>to persons riding the amusement device or to persons in, on, under or near the amusement device;</u> the owner or operator shall:</p> <p>(remainder of section unchanged)</p>		
<p>Supporting Statement:</p> <p>This code change from the Amusement Device Technical Advisory Committee clarifies the circumstances where the additional measures need to be taken in response to an accident. The language is the same used for the requirements for liability insurance.</p>		



## ONGOING ISSUES

Date: February 22, 2007

To: Stakeholders

From: Emory Rodgers, Deputy Director, BFRD-DHCD

Subject: Code Change Meetings for the 2006 Regulations

**DHCD is holding two meetings for Stakeholders to attend and discuss code changes and issues for consensus. The meetings are being scheduled for April 9, 2007 at 9:30 here at DHCD in our Board Room and a 2<sup>nd</sup> meeting on June 18, 2007 also at 9:30 at DHCD in our Board Room.**

Most all of the issues listed have been on the table since last year so stakeholders could review them and decide if there was an interest in submitting code changes. In a few instances we have retained the issues so the Board of Housing and Community Development's Codes and Standards Committee would be aware of the issue. There are also several 2007 legislative bills that would require the BHCD to take some action.

**USBC International Residential Code:**

1. USBC R317.1: Code change to clarify how to apply the section when there is a property/lot line.
2. USBC R408.3: Review more stringent venting for crawl spaces. No code change has been submitted.
3. USBC R613.3: Sill height at 24 inches and should it be 18 inches? Code change to delete.
4. USBC R310.1: Does the state amendment need to be amended with "porch" besides "screen porch" and does the Exception #2 need to only have 13D as one can do a better system?
5. USBC R312.1 and IBC 1013.1: ICC CTC committee has recommended clarification on how to measure for guards. Do we want to include in the 2006 USBC or wait until 2009?
6. USBC R602.10: Va. wall bracing code change for 2006 IRC with many parts approved already for the 2009 IRC.

**USBC Administrative Section:**

1. Sections 103.3 and 108.1 #1: Coordinate with Virginia Rehabilitation Code/IEBC and what is a "change of occupancy".
2. Sections 103.4 to 103.7 and relation to Section R313.1 and others: Questions are brought up routinely on how to apply these sections and when new requirements are necessary or can use or replace with existing materials and equipment so as not to be deemed a hazard. Do we need clarification and code changes?
3. Section 108.2: As the section has added exceptions to permits we have exceptions to an exception that is bad format and can lead to confusion. Examples include roofing replacement not required except if in 110m.p.h wind zones or some interior finishes are exempt while others are not and ordinary repairs are exempted with then exceptions to that exemption. This has been discussed for several cycles and now is the time to reformat for clarity.

4. Section 108.2 and SB1053: BHCD to consider allowing localities with historic districts to be allowed and require a permit for roof, window and siding replacements.
5. Section 110.2 and HB2497: BHCD would allow annual permit to be issued for construction, alterations and repairs on the same property. Need a code change.
6. Sections 110.6 and 113.3 HB 2489: Legislation to have 3-year limit on IRC building permits was tabled with expectation that the BHCD would take up this issue. Could delete present 6-months for suspension/abandonment of a permit and substitute the 3 years or retain 6-months and place 3-year limit or some combination thereof. Staff will do a code change for purpose of discussion.

#### USBC Technical Amendments and IBC issues:

1. Section 310.1: Code change for bed and breakfast to be R-5 and not R-1 with 10 or less occupants. Would include staff or family residing in the home. A change is necessary on this issue.
2. Section 310.5 for R-5 and R-4: IBC would allow R-4 to not be sprinkled by referencing the IRC for construction. Do stakeholders want them to be sprinkled or only sprinkled if more than 8 occupants or leave as is with 16 occupants?
3. Section 308.3: Does the 2006 USBC address B surgical centers requiring alarm systems and sprinklers now or wait for the 2009 IBC to sort out? If the surgical centers receive federal payments they have to be sprinkled with alarm systems per NFPA 101.
4. E occupancy: Gyms and auditoriums are part of the E and not A occupancy in schools. Any interest on code changes?
5. Chapter 4 I-3: Department of Corrections has submitted 12 or so code changes for review with commitment to have submitted into the 2<sup>nd</sup> cycle for the 2009 IBC.
6. Table 503: Code change to have I-1 more stringent than IBC allowing wood construction only for 1-story buildings.
7. Section 707.14.1: Code change to require for highrises an elevator enclosure that has 5 options. Legacy code and here in Virginia not required elevator lobbies where sprinkled per 13.
8. Section 903.2.1.2: A-2 would reduce from 300 to 100 occupants sprinklers that would now mandate sprinklers for many smaller restaurants. Is this okay with industry and what is the fire record? Would it be more realistic to leave at 300 and lower to 100 persons for nightclubs?
9. 2006 Tables 1015.1 and 1019.3: Would need 2<sup>nd</sup> exit at 49 persons versus 50 and where had more than 10 children in daycare. Does stakeholders want to retain 50 or are okay with 49 and 10?
10. CO alarms: No code change to date, but is on ICC agenda in May. SB1077 if passed would require BHCD to do retroactive for dormitories and licensed assisted living facilities and for new construction in the same occupancies.

#### USBC Virginia Maintenance Code:

1. Sections 105.5 and 105.6: Question on when can placard for unsafe or unfit for human habitation? Can it be done immediately as most believe or you have to wait? Do we need code change?

2. Question on violations and unsafe provisions as being circular requiring a code change?
3. PM 304.14: Is it clear screens aren't required where there is mechanical ventilation and is a code change then necessary?
4. PM Table 404.5 from 2003: Insert into 2006 and the IRC and IBC so can enforce overcrowding and bedrooms sizes. Code changes are submitted.

**SFPC:**

1. F508 and IPC: Question arose on fire mains and application of the USBC and SFPC that should work together and not conflict. Also need backflow protection. Any need for code change to ensure coordination?
2. F2404.15.5 and 2404.15.6: Cooking tents any need for code change for clarification on application and definitions?
3. International Wildland Urban Interface Code: Code change submitted to allow localities to establish districts of 50 acres or more to provide access and defensible spaces around buildings.
4. Fire Services Board Code Committee likely to have other code changes by the April meeting for review.

**Others:**

1. Work group will have a code change for in-building emergency communications for review at the April meeting.